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The American Artisan

THE HARDWARE RECORD

Volume 42.—No. 20. CHICAGO, NOVEMBER 16, 1901. $2.00 Per Year

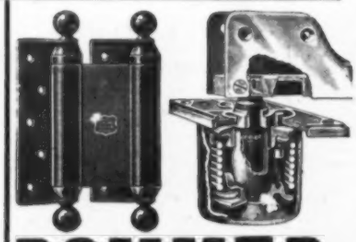
May have pouch feed and flush reservoir if desired.

You don't go after **Monarch** business, but we do and find plenty of it for you from first to last. We work for you and with you. Our elaborate plan and **Monarch Ranges** will stimulate your business and operate that branch with better profits. By taking one you get the other. Your inquiry will be answered with conclusive proof.

Malleable Iron Range & Mfg. Co.
BEAVER DAM, WIS.

We make a full line of
Stove Bolts, Stove Rods,
Machine Screws,
Pointed Pins,
Threaded Wires,
Rivets,
Special Bolts,
Mica Bolts,
Cold Pressed Nuts.

Atlas Bolt & Screw Co.
CLEVELAND, O.



BOMMER SPRING HINGES.
BOMMER BROS. BROOKLYN, N.Y.

A UNIVERSAL REMEDY FOR

LEAKY ROOFS.

The valuable qualities of a good roofing cement are firm adhesiveness and elasticity. These qualities the

AMERICAN SEAL BUILDERS' AND ROOFERS'

ELASTIC OIL CEMENT

possesses. It will adhere firmly to Slate or Metal and will not crack or crumble. It is especially recommended for repairing leaks around chimneys, dormer windows, skylights, scuttles, firewalls and any place that requires fixing on a roof, either Slate, Tin or Shingle.

This Cement will answer to repair **a roof** when **Solder** can not be used.

MANUFACTURED BY

Wm. Connors Paint Mfg. Co.
TROY, N. Y.
WESTERN AGENTS—J. L. PERKINS & CO.,
241 Lake Street, - - - CHICAGO, ILL.
STOCKHOFF SUPPLY CO., ST. LOUIS, MO.

Trying to do business without advertising is like winking at a girl in the dark; you know what you are doing but nobody else does.

BRADLEY SHELF BRACKETS.
Strong, Light and All Right.
ATLAS MFG. CO., New Haven, Ct.

THIS SPACE FOR SALE
INQUIRE OF OWNER,
DANIEL STERN, 69 DEARBORN ST.,
CHICAGO.

Black Diamond Files and Rasps.
PERFECT—ALWAYS

Twelve Medals Awarded.

At International Expositions.

G. & H. BARNETT CO.,
Black Diamond File Works. PHILADELPHIA, PA.

Columbus Bolt Works,
Columbus, O.

Bolts,
Nuts,
Washers,
Turn Buckles,
Bridge and Roof Rods
and
Bolts

ALL KINDS OF CARRIAGE FORGINGS. ON APPLICATION. CATALOGUE

The "Globe" Ventilator
In Brass, Copper, Galvanized Iron and with Glass Tops for Skylight purposes.

For Perfectly Ventilating
Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character.

Smoky Chimneys Cured.
"Globe" Ventilated Ridges. Send for Pamphlet.

Manufactured by
Globe Ventilator Co., Troy, N.Y.

BOILERS AND RADIATORS

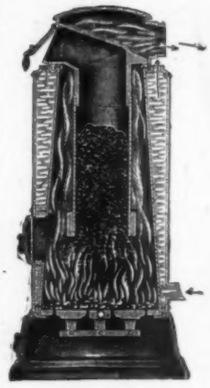
A Postal Card from you will bring valuable, complete information in regard to the best, most comprehensive, strictly modern line of these goods.

WRITE US TODAY.
New York, Boston, Philadelphia, St. Louis, Buffalo, Minneapolis, Denver, Detroit, London.

AMERICAN RADIATOR COMPANY

Lake and Dearborn Sts., CHICAGO.

"TABASCO" Water Heaters.



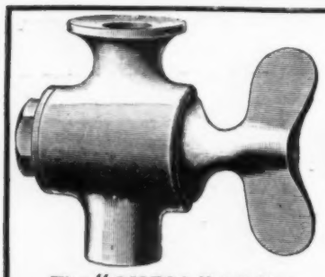
ALL STEEL, SELF-FEED, SHAKING GRATE.

FOR Small Residences, Greenhouses, Flats, Hotels, Baptisteries, Bath Houses, any place a supply of hot water is needed.

SEND FOR CATALOGUE.

Kewanee Boiler Compa'y
Kewanee, Ill.

CHICAGO STORE: 167-169 E. Lake St., CHICAGO.



The "OMEGA," 2-3 Size. To attach to bottom of can.

BEER, MILK CAN, OIL CAN, CREAM SEPARATOR

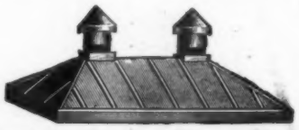
FAUCETS.

Various Sizes and Styles.

MANUFACTURED BY

CLARK NOVELTY CO., ROCHESTER, N. Y.

Also Mfrs. of The CLARK Kerosene Oil System for Heating Soldering Coppers.



"The Illinois"

METALLIC SKYLIGHTS

Are known in every State. Have stood the test for years. Are made in 10 styles and 500 sizes. Complete Skylight, Cornice and Finial Catalogue mailed free.

J. H. JONES, Mfr.,
Lock Box 33. STREATOR, ILL.

M. O. Miller, Cambria, Wis., writes: "Please discontinue my adv. in the want column of The American Artisan or I shall have to engage a stenographer."

The Kelsey Warm Air Generator

RECEIVES A

SILVER MEDAL

AND

HIGHEST AWARD

FOR

Warm Air Heating Apparatus,

AT

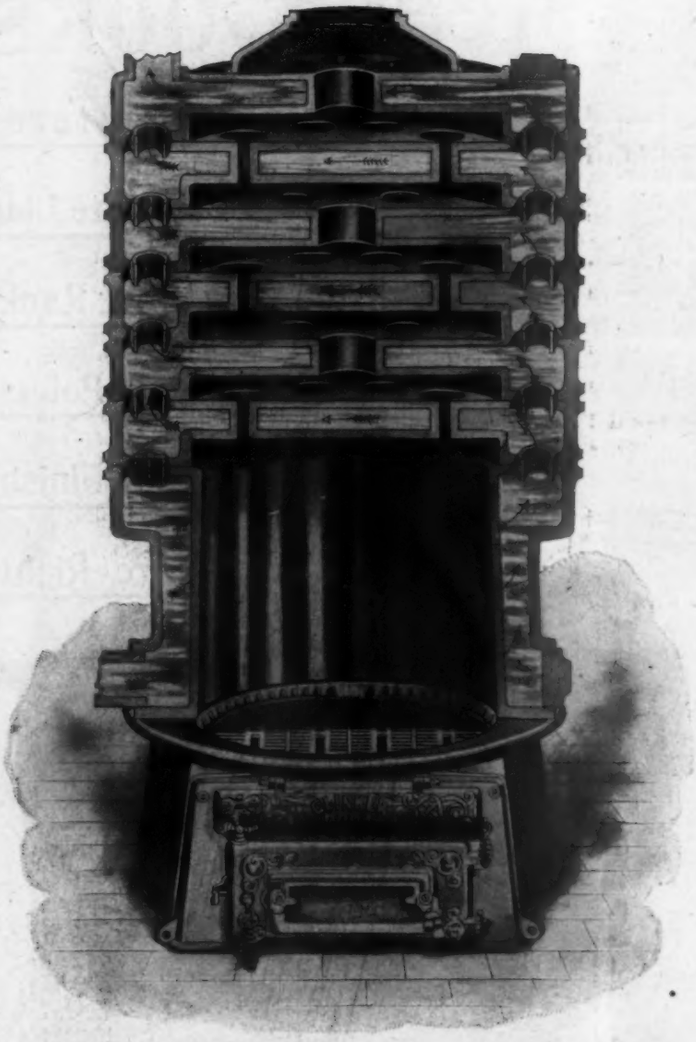
PAN-AMERICAN EXPOSITION.

Kelsey Furnace Co.,

MAKERS OF THE Kelsey Warm Air Generator.

SYRACUSE, N. Y.

Ideal Boilers



Ideal Invincible Water Boiler.

We welcome the critical customers. Great pains are taken to supply their wants, for with our assortment of Boilers it is easy to please the most exacting buyers.

Send for our new 1901 Catalogue—profusely Illustrated.

AMERICAN RADIATOR COMPANY

Lake and Dearborn Streets, Chicago.

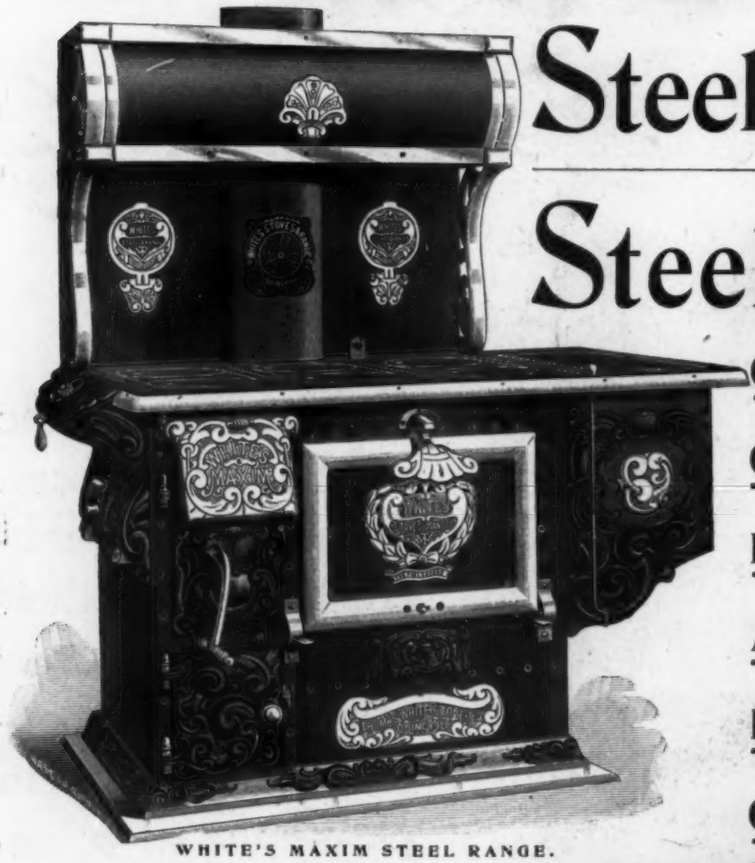
NEW YORK: 42-44 E. 20th St. BUFFALO: 922 Prudential Bldg. MINNEAPOLIS: 513 Guaranty Loan Bldg.
PHILADELPHIA: 622 Arch St. ST. LOUIS: 207-209 N. Tenth St. DENVER: 813 15th St.

WHITE'S

Steel Ranges

AND

Steel Cooks



WHITE'S MAXIM STEEL RANGE.

Original Features

ARE FOUND IN

Our Very Complete Line

THAT PLACE THEM

In the Very Front Rank.

THEY HAVE

All the Strong Points,

COMBINED WITH

Best Material & Finish.

. . . . .

Our Prices Are Right.

The Very Finest

Line of Steel Cooks.

The Largest Variety

AND

The Best Values.

EVERY STOVE

Guaranteed

TO BE

First-Class.

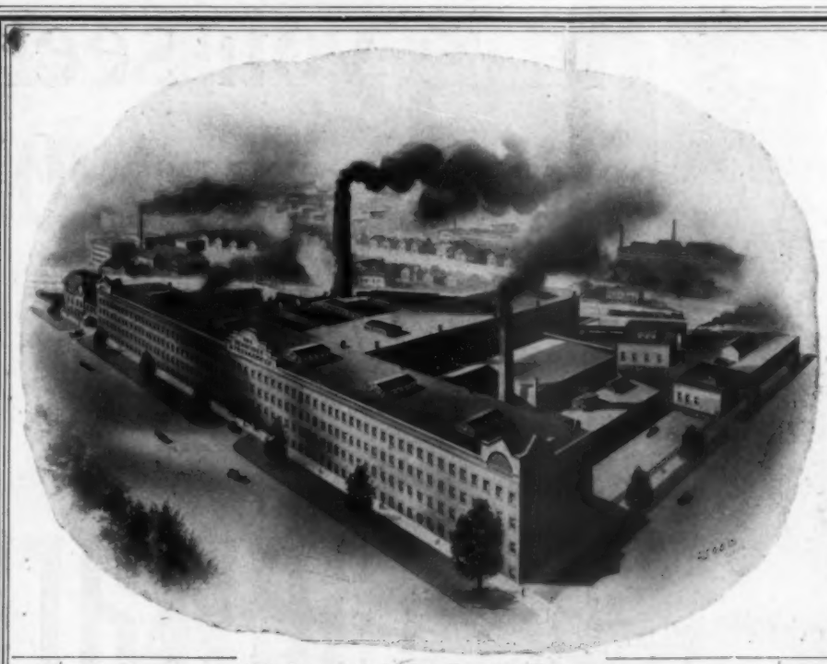
Having an ample supply of steel in stock, we re prepared to make **prompt shipment.**

For detailed description, prices, etc., write for our 39th Annual Catalogue.

WHITE'S MODEL STEEL COOK.

Thomas White Stove Co.,

QUINCY, ILL.



The Largest and Most Complete Factory in the World for the Manufacture of VAPOR STOVES AND RANGES, STEEL RANGES, HOTEL GAS RANGES, COMBINATION COAL AND GAS RANGES, OIL HEATERS, AND ALL STYLES OF GAS COOKING AND HEATING APPLIANCES.

To the Trade

Our 1902 Vapor Stove and Range Catalogue is now ready to mail. Send for one. They are yours for the asking.

This Catalogue is devoted solely to our Vapor Stove line and we have grouped together a line of STOVES and RANGES that, through their superior quality and recognized merit, have established an enviable reputation in the Stove market.

Our policy has always been to progress, to introduce new ideas and improvements possessing real merit, and by giving constant and careful attention to every detail in manufacture, we propose to maintain the pre-eminent qualities for which our product is justly famous the world over.

In addition to our **Vapor Stoves** and **Ranges**, we make a very complete line of **Steel Ranges, Oil Heaters, Hotel Gas Ranges** and **Gas Cooking** and **Heating Appliances** of all kinds.

THE

Schneider & Trenkamp Company

CLEVELAND. CHICAGO. SAN FRANCISCO.

Have you seen the New 1901 Prize Stewart ?

It is the best Medium-Priced Base-Burner ever made.

Order a Sample and be convinced.

The Fuller-Warren Co.

MILWAUKEE, WIS.

Established 1819.

MONITOR

The King of Hard Coal Base Burners.

The Absolute Monarch of the Heating World.

No other stove can compare with it in utilization of heat units, or in symmetry of design. The diving flue is in front, extending the entire width of the stove, and thus the greatest heat is drawn to the front of the stove where it is most needed. It will evenly heat the largest room as every particle of heat produced is radiated and kept in circulation.

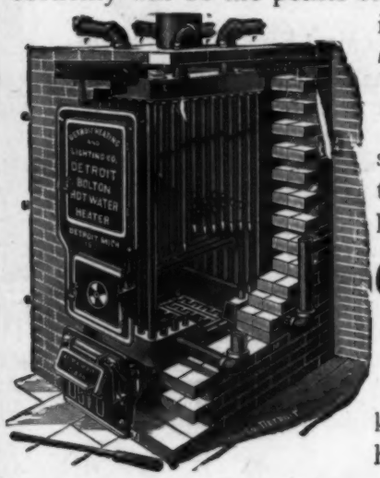
SEND FOR CATALOGUE.

Wm. Resor & Co.

CINCINNATI, OHIO.

The Burning Question of Heat

will be uppermost from now on in thousands of homes. Comfort, health and fuel economy will be the points of issue. You can meet them every one without a setback if you'll talk



The Bolton Hot Water Heater

Its durability, its efficiency, its economy in fuel consumption, its satisfaction-giving qualities in general; all these points are attested by the high endorsements we have to show from its users. Don't forget our

Combination Gas Machine and Mixing Regulator.

A light stronger than electricity and cheaper than kerosene. Let us show how we can help you and you help us on both these propositions. Write us.

Detroit Heating & Lighting Co.

DETROIT, MICH.

Model Oak

Entirely New Line for 1901.

We use the old name, but the numbers are different.

The Round Air Tight Register is ground into its seat on the inside of the ash pit door and will remain at any degree of opening required to supply air for combustion through the opening.

The register construction is such that the **Grate Handle** can be pulled out through the register opening.

The Extension on Top of the Fire Pot extends up inside of the steel drum and is cast solid with the fire pot so it cannot twist and warp.

The Sectional Ring fits over the flange turned out on the bottom of the steel drum.

The Ash Pan fits tightly all around the edges of the ash pit.

The joints remain tight.
The price is just right.
Ask for more information.

The Portsmouth Stove & Range Co.

THE BUSIEST MAKERS OF STOVES & RANGES IN THE WORLD

Portsmouth, O.

MORLEY BROS.,
Saginaw, Mich.,
Agents for Michigan and the Northwest.

MODEL OAK.

CinderellA Steel Ranges

Made to Meet Every Requirement.

We are making the Steel Range business a specialty—just as much so as if we did not make anything else.

We have a separate plant for that purpose, equipped with modern appliances, operated by the best experience.

If you handle Steel Ranges, we want you to buy them from us.

Our prices are low enough to make it worth your while to deal with us, and high enough to insure the best possible workmanship and materials.

We can fill your orders promptly.

Our Catalogue is at your disposal.

STOVES AND RANGES CINDERELLA NEVER FAIL

Pittsburgh Stove & Range Company,

PITTSBURGH, PA.

Western Sales Agent:
W. D. SAGER, 38 and 40 Michigan St., Chicago Il.

STOVES AND RANGES CINDERELLA NEVER FAIL

JEWEL STOVES AND RANGES..

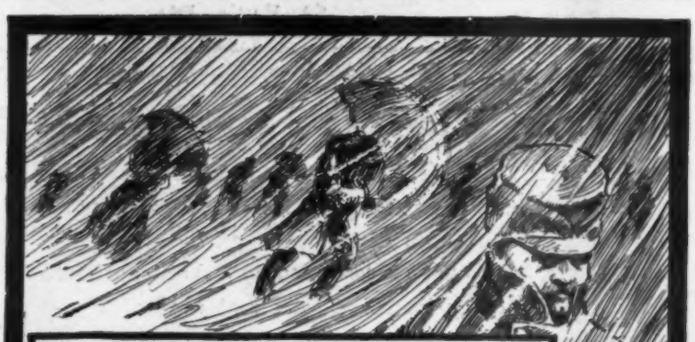
JEWEL STOVES AND RANGES
LARGEST STOVE PLANT IN THE WORLD

A Complete, Well Advertised Line;
Low Prices and Good Workmanship.

Please Write for Catalogue.

DETROIT STOVE WORKS.

Detroit - Chicago.



If there's a
BLIZZARD OUTDOORS
Use a

RICHMOND

HEATER

And you'll have
SUMMER INDOORS.

It's a Heater that Heats. Effective in all kinds of weather, economical of fuel, easy to regulate, durable.

Your dealer should have our Catalogue.
If not, write to

The Richmond Stove Company

NORWICH, CONN.
CHICAGO HEATER & SUPPLY CO., CHICAGO.
RUMSEY & SIKEMEIER, ST. LOUIS, MO.

WE HAVE

OAK STOVES

—five sizes—for prompt shipment. Our prices will interest you.

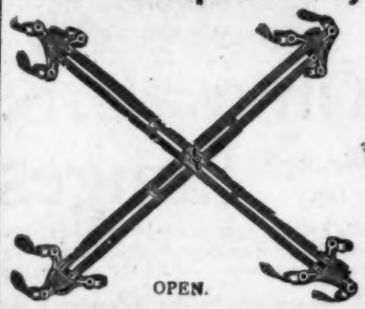
Shinnick, Woodside & Gibbons Mfg. Co.,
ZANESVILLE, - - OHIO.

Established 1874.
The largest and most reliable **Foundry Supply House** in the world.

THE
S. Obermayer Co.,
CINCINNATI, OHIO.
CHICAGO, ILL.
manufacturers
"Everything You Need in Your Foundry."
Importers and refiners
PLUMBAGO GRAPHITE.
Catalog Sent on Application.

The "Eclipse" Adjustable Stove Truck

Made entirely of Steel and Malleable Iron.



OPEN.

CLOSED.

It is light, neat, and at the same time strong and durable. Will last a lifetime and saves its cost annually in preventing breakages, as it is impossible to tip or shove a stove from the ECLIPSE TRUCK.

Stellwagen & Kynoch, St. Ignace, Mich.

Persistent Advertising

One who watches carefully the pages of general advertising mediums is struck by two things: the persistency with which those advertisers who are recognized as successful maintain their advertising week after week, month after month, and year after year; they never seem to abate their effort, and apparently the volume of their business increases steadily. The other thing noticeable is the large number of advertisers who thrust their announcements above the surface for a little while and then sink into oblivion. They either had not merit as a basis for their claims or they did not possess the skill to steer their enterprise successfully, or else they lacked the nerve to put forth proper effort.—[*Advertising Experience.*

Weigh

the fire box in any steel range on the market. Then weigh that in the

Willard Steel Range

and you will find it is far heavier. This places the weight where it is most needed and makes this range very durable. Every dealer should write and secure the agency for this popular range.

Wm. G. Willard, Manufacturer,

619-621 N. Fourth St. • • • • St. Louis, Mo.

Economy Gas Heating Stoves

For Natural Gas. For Artificial Gas. Made in **fourteen** sizes and **six** styles. The largest and most complete line of **closed front, artificial coal filled** Gas Heating Stoves on earth.

Absolutely free from odor or condensation. Dealers should secure the agency and thereby enjoy increased sales and profits.

Manufactured by

Economy Stove & Mfg. Co.

Write for Catalogue. DETROIT, MICH.

BRAND STOVE CO.

We make largest line of cooking and heating apparatus, cast cooks, cast ranges, steel cooks, steel ranges, hotel outfits, heating stoves, furnaces, hot water and steam heaters. Send for catalogs.

MILWAUKEE, WIS.

There's Only One

Double Flue Construction Employed in Steel Ranges and that is in the Champion double flue hot blast steel ranges, which are guaranteed to give satisfaction with any kind of fuel. They are finished in Japan and polished steel or Russia iron.

Champion Steel Range Co.

CLEVELAND, OHIO.

We are represented by the Following Hooues:

Lee-Glass-Andreesen Hdw. Co., Omaha, Neb.

James Graham & Son, San Francisco, Cal.
Michigan Distributing Co., Lansing, Mich.
J. M. Litchfield, New York, N. Y.
Kettiesen & Degetan, Chihuahua, Mex.
Moore-Handley Hdw. Co., Birmingham, Ala.
Richards & Conover, Hdw. Co., Kansas City.
Chicago Stove and Range Co., Chicago, Ill.
Jacob Retterer, Chicago, Ill.
Corbett, Failing & Robertson, Portland, Ore.
Palmer Hdw. Co., Savannah, Ga.

Ohio and U. S.

Wrought Steel Ranges

We are pioneers in steel range business; old in experience yet adopt modern up-to-date methods. Write for our catalog.

Tinnerman Steel Range Co.,

CLEVELAND, O.

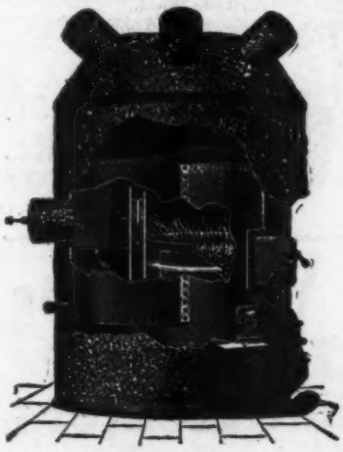
STAR STOVES AND RANGES
ENTERPRISE STOVE CO. VINCENNES, IND.
GUARANTEED

CATALOGUE SHOWING

Gas Ranges — Cast Cooks
Steel Ranges — Cast and
Cast Ranges — Steel Heaters
Steel Cooks — Hot Plates

WILL BE FURNISHED FOR THE ASKING BY

Enterprise Stove Co.
VINCENNES, IND.


Weir Furnace.

Weir ALL STEEL GAS AND SOOT CONSUMING **Furnace.**

The Heaviest Steel Furnace Made.

Absolutely gas and dust tight.
A great heat producer, but a fuel saver.

MADE IN TWELVE SIZES.

"The Handy Furnace Pipe"

The saving of labor in putting it up really makes it the cheapest hot air pipe on the market.

Manufactured by

Meyer Furnace Co.

Send for Catalogue. PEORIA, ILL.

Is Absolutely Safe.

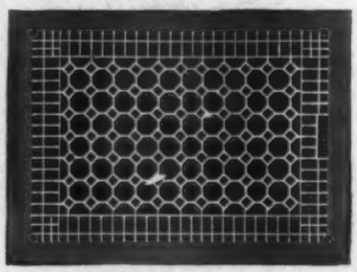
Handy Pipe.

Royal Heaters.
MANUFACTURED BY THE
HART & CROUSE CO.
UTICA, N.Y.

ALL THE LEADING LINES OF
STEAM, HOT WATER & HOT AIR,
FOR HEATING ALL CLASSES OF BUILDING.

235 WATER ST. N.Y. COLUMBUS, O. BRANCHES. 79 LAKE ST. CHICAGO. ST. LOUIS.

Henry & Scheible Co.
SUCCESSORS TO T. E. HENRY.
10 Long St. CLEVELAND, O.



ALL SIZES—ALL STYLES OF FINISH. PROMPT SHIPMENTS
Quality and finish unexcelled.

SEND FOR CATALOGUE.

Advertising is the root of all money.

R. B. WARD, Belleville, Kas., writes:

"Please take my advertisement, 'Tinner Wanted,' out of THE AMERICAN ARTISAN. Your paper certainly reaches the craft. I cannot find time to answer all the applications coming in."

STILL IN THE LEAD

MUELLER FURNACES AND BOILERS

ALWAYS TO THE FRONT.

Made in All Sizes—For All Kinds of Fuel.

Write for Catalogue and Prices.

Double Radiator, All Cast Iron.

Return Flue—Steel Plate Radiator. For Long Wood.

EVERYTHING IN THE HEATING LINE.

GET OUR SPECIAL REGISTER OFFER.

L. J. Mueller Furnace Co.

191 REED ST. MILWAUKEE, WIS.

Established 1857.

Gilt Edge Warm Air AND Combination Heaters

are leaders embodying points of furnace excellence possessed by no other furnaces. A large variety of sizes and styles, each especially adapted for a certain class of fuel. We are manufacturers of a complete line of warm air registers, safety pipe and tin galvanized iron furnace fittings.

R. J. Schwab & Sons Co.,

MILWAUKEE, WIS.

Emperor Furnaces

For Wood

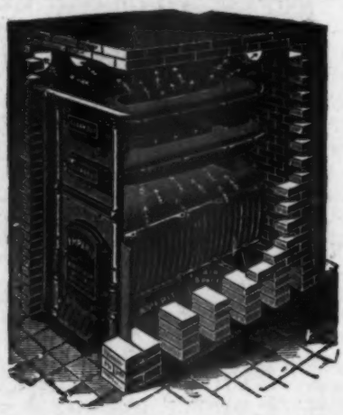
Simple. Safe. Durable.

The Best and Cheapest Line of Wood Furnaces.

Furnished for Either Brick or Galvanized Iron Casing. Send for Catalogue.

Bergstrom Bros. Co.

Neenah, Wis.



O. C. Jamison, Homer, Ill., writes: "I FIND MY ADS. IN YOUR ESTIMABLE JOURNAL HAVE BROUGHT GOOD RETURNS."

SUPERIOR FURNACES

UTICA HEATERS

ALWAYS EFFICIENT

IMPROVEMENTS.

We are constantly making additions and improvements to our entire line of furnaces. SUPERIOR Furnaces and UTICA Heaters are as nearly perfect as it is possible to make any warm air furnace.

To say a furnace is thoroughly modern and up-to-date—and mean what you say—is half the selling argument.

We would like to send YOU our catalogue and quotations.

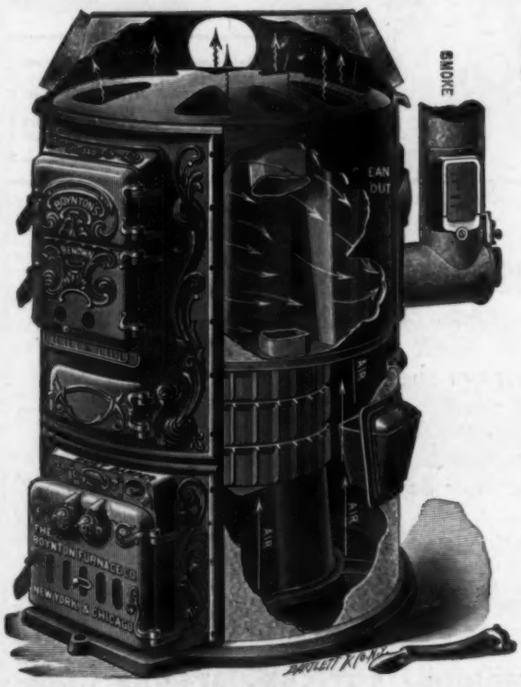
Utica Heater Company,

Manufacturers
UTICA, N. Y.

Chicago Heater & Supply Co., Western Managers, 54 Dearborn Street Chicago, Ill.

The making of heating apparatus—

Hot Water Heaters, Steam Heaters and Furnaces,



is our Specialty. In over fifty years of experience we have met with about every phase of the heating problem. The manufacture of economical and durable heating apparatus has been our constant aim, and our success has been fully demonstrated by our long continuance in this line.

REMEMBER, efficiency and durability are the sure tests of cheapness.

Catalogues, Price Lists and Discounts cheerfully furnished the trade.

The Boynton Furnace Co.,

New York and Chicago.

The Hen

with one chicken didn't strut about any more than some furnace makers who make a single furnace which appeals only to a small class of prospective buyers. Shrewd dealers are shaking these small fry makers and are taking agencies for

Floral City Furnaces

which are made in 15 distinct types of warm air and combination heaters for any class of work or any kind of fuel. Write for agency.

MONROE FOUNDRY & FURNACE CO.,
MONROE, MICH.

Monarch Air Blast Furnace

STOP! Now and write for our catalogue and price list. The Monarch Air Blast (all cast iron) will make you money and build for you a reputation in the Heating Business, it has done so for **OTHERS.**

The Forest City Foundry & Mfg. Co.

CLEVELAND, OHIO.

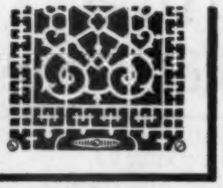
We ship our Register orders promptly.

75 Sizes.

INDEPENDENT REGISTER CO.

158 Champlain Street,

CLEVELAND, O.



Geo. W. Brown, Jr., Hillsboro, Ill., writes: "You may kindly discontinue our WANTED TINNER adv. that you have so kindly carried for us the past three issues. I have received replies from Vermont to Dakota, and think that we have secured a good man."

COMMERCIAL LAW. COLLECTIONS.

THE AMERICAN ARTISAN AGENCY,

LAW AND COLLECTION DEPARTMENT OF

THE AMERICAN ARTISAN,

UNDER MANAGEMENT AND PERSONAL SUPERVISION OF

RALPH F. STERN, Atty. 69 Dearborn Street, CHICAGO.

Today is the time to attend to your past-due accounts. Let us help you.

We have a thoroughly organized Collection Department. Collections made anywhere.

Full reports furnished and remittance made the same day collection is made. Careful attention guaranteed in each case.

Rates reasonable, and no charge where no collection is made.

No membership fee.

Reliable attorneys in every city and town. Claims prosecuted without litigation when ever possible. Long distance telephone in office.

PHONE EXPRESS 677.

CHICAGO REFERENCES:—
Chicago Engineer Supply Co.
Babcock & Wilcox Co.
Robert Stevenson & Co.
Regan Printing House.
And any National Bank in Chicago.

THE AMERICAN ARTISAN AGENCY.

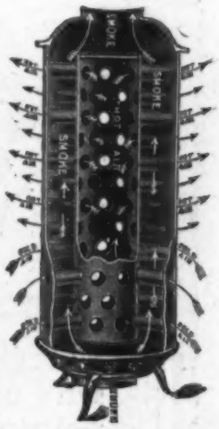
RALPH F. STERN, Attorney,

69 Dearborn St., CHICAGO

"A tea kettle boils quicker on my chimney than on my stove."

IS IT SO?

It is said that a tea-kettle will boil quickest on top of a chimney. However that may be, all agree that there is too much heat wasted there. Nothing but the cross tube ROCHESTER RADIATOR has ever trapped it. If you were to heat a poker, would you hold it at the side of the flame or over the top? Or would you cook food on the side of a cook stove in preference to the top? It is thus with the ROCHESTER RADIATOR which takes the heat from the top of the current and not from the side. The cross tubes cool the hot current, just as you would blow across a cup of tea to cool it only there are from 96 to 120 such currents in operation.



ROCHESTER RADIATOR CO.,

120 Furnace Street, ROCHESTER, N. Y.

Square Style.

New Era Radiators.

The harvest time for selling these goods is now. You might just as well make something out of them this year. There are very few houses where one or more of them cannot be used to an advantage. It will only cost you a postal card to receive our booklet, **"A Modern House Warming,"** and special inducements to the trade.

Send us your address.

Cylindrical Style (No feet accompanies this style).

Wilmot Castle & Co.,

77 Elm St., ROCHESTER, N. Y.

No. 230.

Draft Register Screw and Plate

COMPLETE

MANUFACTURED BY

The Fanner Manufacturing Co.

CLEVELAND, OHIO.

Registers and Ventilators.

A Full Line, Unique Designs.

Quality and finish unexcelled. All styles of finish, from Japanned to Gold Plated.

Send for Catalogue:

The Philadelphia Hardware and Malleable Iron Works

Philadelphia, Pa.

Persistence in Advertising

In the expansion of business now bringing profit to so many manufacturers, advertisers who have made themselves regularly prominent in the past five years have been notable in reaping the rewards of persistent publicity.

ROUND OAK—STANDARD of AMERICA

CURTIS CANDY CHI. 1900

One of the best points of the famous Genuine *Round Oak* is the way

It heats the floor under and around

the stove. The base is small. The grate hangs low in the ash pit, close to the floor—no ash pan in the way of the heat. See? Notice the imitations—very large square bases, grate high from the floor, deep ash pan. How can they warm the floor? This is but one of a great many reasons why the *Round Oak* outsells all other stoves. We want an agent in every town—where we have none.

"come kitty it's bed time"

***Estate of* P. D. BECKWITH,**
Dowagiac, Michigan

MAKERS OF GOOD GOODS ONLY

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HB CHICAGO

ESTABLISHED 1880

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

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CHICAGO, NOV. 16 1901.

A NATIONAL convention for the discussion of commercial reciprocity will be held at the Hotel Raleigh, in Washington, D. C., beginning on Tuesday morning, Nov. 19, and continuing for three days. This convention will be composed exclusively of manufacturers properly accredited as delegates by trade and commercial organizations, and its deliberations will be confined to commercial reciprocity in its bearing upon the industries of this country and its influence upon our export trade.

THE activity of American manufacturers shows no signs of abatement, whatever the conditions in other countries. At least, this appears to be true, measuring the activity of manufacturers by their demand for raw material from other parts of the world which enter into their great industries. The recent figures of the Treasury Bureau of Statistics show that the importation of manufactured materials during nine months ending with September, 1901, were not only larger than those of last year, but larger than those of any year in the history of our commerce and industries.

THE internal commerce of the United States during the first three-quarters of the commercial year is in many respects the most remarkable in the history of the country's internal trade, while in some features there is a decline from the high tide of activity for the corresponding period of a year or two ago. The monthly summary of the Treasury Bureau of Statistics reports that the trunk-line movement of flour from Chicago points during four weeks of September reached an average of 90,842 barrels. For the first time in the year one week's grain movement fell below a million bushels. The provision trade shows the highest weekly average of the year, being 31,196 tons per week.

At the five chief live stock markets in the West the receipts for nine months ending September 30 were 5,236,356 cattle, 13,413,669 hogs, and 5,331,155 sheep, aggregating 23,981,180 head of these three kinds, compared with 22,239,971 head for the like period of 1900.

Chicago received 213,118 cars of the five kinds of stock, compared with 200,493 cars for the first nine months of 1900. Kansas City's arrivals of both cattle and hogs were larger than for any previous year to September 30. Omaha's packing industries consumed 2,681,431 head of cattle, hogs and sheep, against 2,590,-662 head last year to September 30. The corresponding figures for St. Joseph are 2,029,406 head and 1,-580,891. Nine months' receipts at St. Louis in 1901 were 2,903,045 and 2,619,652 head for 1900.

VARIOUS state hardware associations are contemplating the establishment of a fire insurance company as an auxiliary. The Minnesota Retail Hardware Dealers' Association already has such an organization, and its workings have been very satisfactory, an important saving to the membership being effected. The National Association of Credit Men have recently taken up this question of credits in conjunction with retail insurance, and this strong association, embracing credit men in all lines, is emphatically of the opinion that retailers should insure their stocks. The view of credit men in this matter is very convincingly set forth in the following article of this subject, written by C. B. Higman, of Sioux City, Iowa:

"Credit men should insist on merchants carrying fire insurance on their stocks. Every merchant should carry an amount of insurance sufficient to cover his indebtedness in case of fire. There might be an exception made in case of firms that have a very high commercial rating and are abundantly able to pay their debts regardless of what might happen. Such firms, however, you will find as a rule fully insured.

"This matter of insurance is a very vital point to be looked after in a credit man's business. Many a party or firm who intend to pay their bills will saddle the loss off on creditors when overtaken by fire, giving as an excuse, that they had no insurance.

"The writer has had a little experience along this line. Some time ago, a merchant who had been burned out was called upon by him for a settlement of our account. He was one of those who was insured for about one-half of his indebtedness. As he walked down the street, friend after friend of this man stopped and condoled with him over his loss when I knew very well at the time that the loss was ours and not his. The day following the adjuster arrived and settled the insurance, which enabled the insured to pay fifty cents on the dollar, our loss consequently being one-half.

"Merchants should read their insurance policies more carefully and understand them more fully. For instance, there is a clause against carrying fireworks about which merchants know nothing, and many of them endanger their policies by carrying such without a permit.

"If the merchant's business does not warrant paying the insurance it would be better for him to close out, because if it is worth running at all it is worth running on business principles. This means insurance against fire—a protection for the merchant—a guarantee of good faith towards the creditors."

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

ONCE upon a time there was a Certain Young Man who was Sagacious enough to pick out a father and a grandfather who were Money Getters.

This shrewdness gave the young man a Big Pile right off quick. But being human this Young Man wanted a great deal bigger pile than he had. So he went into Business. He picked out a commodity which everybody used. It might be Soap. It might be fancy Oat Meal. It might be Table Cutlery.

He made a good article and he spent Most of his Pile in Advertising in the daily Press to reach the Consumer. As he spent Millions in reaching the Consumer he found it necessary to sell to the Retailer at a High Price, which gave the latter only a Scant margin of Profit.

The Retailers handled his goods. They had To, because there was a Big Demand, but because there was no Profit in the goods they felt Sore, and they Knocked the goods hard.

Now this was a Bad Policy for the Retailer, as this Young Man said in his Advertisements, "Don't let the Wicked Retailer SUBSTITUTE. If he won't give you MY Stuff, go somewhere else."

But the people, in spite of this Warning, generally had Confidence in the Retailers, and took the Advice of these so-called Bad Men.

While this large Advertiser sold many goods because of his publicity expenditures and was easily In the Money, the Purse went to a Competitor who had fewer Scads than the Young Man. He did business on a different Tack, too. He advertised in the Trade Papers, and instead of Making Faces at The Retailer and saying, "O, Fy! Fy! Go Away You Bad Man," he said, "Won't you Co-operate with me in placing these goods before the Public. If you Buy I will Protect. I don't sell Catalogue Houses. There is a good Margin in my Goods." This Man did not get so many Write-ups in Advertising Papers like Print-or-Sink as his Competitor, but he did Sell a Tremendous lot of Goods.

Jobbers bothered him by asking for Lower Prices all the Time, because they had to buy such a Lot of His Goods to Satisfy the Retail Trade.

Moral.—A Lone Hand Sometimes Wins, But Partners Are Best In The Long Run.

* * *

I am no great hand at fables. Having learned from a perusal of high-class dailies and three-color magazines that the principal ingredients of a fable were capital letters and occasional slang, I have slung one together. The point of my fable is to emphasize the value of the retailer as a distributive agent—a point some manufacturers are prone to overlook. Some manufacturers fondly imagine that every retailer knows all about them. This is a delusion, as many a manufacturer and jobber has awakened up to realize too late.

The successful manufacturer is the one who utilizes the most economic, speedy and successful avenues for bringing his goods to the attention of the trade, and when you are talking of avenues, the best one for hardware manufacturers to take to reach western hardware stores is AMERICAN ARTISAN Avenue—a thoroughfare lined with progressive, up-to-date retail hardware stores.

* * *

AND now we are to have a new light, so, at least, says Prof. Frederick P. Gorham, who is experimenting on decayed meat in order to produce a light that will throw acetylene gas or electric light into the shade. The substance of the problem which is occupying Professor Gorham's mind is the production of the greatest amount of light with the smallest of heat, and he hopes to accomplish this end by chemical means. Having set forth the problem, Professor Gorham bethought himself that there is a kind of animal phosphorescence which is, so far as known, entirely devoid of heat. This is the light observable in glowing summer seas, in fire flies, in decaying vegetation, or decaying flesh. Science has long known that the phosphorescence of the seas, of wood, and meat was from minute animal and vegetable organisms. He obtained a quantity of these from a piece of decayed meat, which he transferred to test tubes containing gelatine. "The light these organisms produce is from oxidation," said Professor Gorham, "just as the heat of our bodies is from oxidation. It is a chemical action. I have been experimenting to find what materials would produce the greatest quantity of luminosity in these small bodies, and have now reduced their diet to three chemical salts, the principal being ordinary table salt or sodium chloride. Another of the salts contains nitrogen, which is essential to the production of light, and there is a little sulphur, which I believe could be eliminated without bad results."

* * *

HIGH among the public benefactors of the future may be enrolled the name of a New York baker, who believes he can reduce the cost of producing bread so as to be able to sell it at 2½ cents a loaf and still have it clean and wholesome with 16 ounces to the pound. In this country, it is true, bread has not quite the position which it occupies in certain parts of Europe. There it is not only the chief article of diet, but is of as much importance as all other kinds of food put together. Here if the workman were deprived of his bread he could still subsist on other things. But at the same time bread has by no means passed out of fashioin. Though it has new and dangerous rivals, and though it is traduced and maligned by health food congresses, it still keeps its place at the head of our list of edibles. Wherever there is food of any kind there is always bread. It is the invariable feature of every meal.

* * *

THE exports of merchandise from the United States in October were smaller by about $17,000,000 than those of the same month in 1900. The shipments last year, however, were phenomenally large and the value of American goods sent abroad last month was larger by about $20,000,000 than in October, 1899. Owing to the drouth of last summer, the October exports of corn alone were $4,000,000 less than in the same month of the year before. For the first 10 months of the present year, the foreign shipments were about $3,000,000 than for the same period of 1900.

News Siftings.

The whale catch for 1901 is only 28. In 1893 294 whales were taken.

The Climax Vapor Lamp Co., is a new Canton, O., concern, capitalized at $10,000.

The Criterion Gas Stove Mfg. Co. is a New York City concern, capitalized at $20,000.

The Western Passenger Association has refused to deal with the question of providing separate apartments for consumptives.

J. P. McCloskey and C. F. Wilson are among the incorporators of the Gate City Stove Works, Catlettsburg, Ky., capitalized at $2,000.

John Harris, S. H. Smart and John H. Smart are the incorporators of the Harris Acetylene Stove Co., Jersey City, N. J., capitalized at $100,000.

The Alexander Mfg. Co., Canonsburg, Pa., capitalized at $12,000, are building a plant for the manufacture of Acme stove pipe elbows and drip pans.

The International Range & Mfg. Co., Ashtabula, O., and the Ideal Foundry Co., Girard, Pa., have consolidated under the style of the Ideal Foundry Co., capitalized at $35,000.

H. Adler Co., Pittsburg, send us an interesting postal circular addressed to the trade, which states, among other things, that their capacity for making Acme gas stoves is a stove every minute packed ready for shipment.

The Galusha Stove Co., Rochester, N. Y., send us a neat little circular declaring that it is high time dealers were placing orders for Norman stoves. The front of this circular shows a clock on a church steeple, and on the inside one finds a neat reproduction of a Norman steel range.

It is stated authoritatively that the rail orders reserved by the United States Steel Corporation are so large that the tonnage booked will keep the rail mills busy until January, 1903. It will require all the mills to run to their full capacity in order to get these orders out by that time.

The Triumph Adjustable Stove Pipe Mfg. Co., Joliet, Ill., are manufacturers of the Triumph adjustable stove pipe, which is easy to put up and when up needs no wire to hold them, as they are solid and tight. This firm would be glad to send prices to the trade on application.

Josiah M. Read, a leading resident of Everett, Mass., died recently in his 92d year. Everybody in the stove business knew him, as for many years he was engaged in inventing, manufacturing and dealing in patent stoves and appliances. In 1846 he invented a range. In June, 1888, although 80 years old, he started anew in business at 61 and 63 Blackstone street, Boston.

Gorman & Millett, Wilkesbarre, Pa., send us a circular showing their wrought steel ranges, made in all sizes suited to the varying wants of the largest hotel and institutions and the smallest families. This firm are also builders of steam tables, warming closets, plate warmers, hot closets for dishes and mammoth tea and coffee urns.

It is understood that an effort is being made by the United States Steel Corporation to secure the co-operation of the independent companies for the purpose of sustaining the price of wire nails and wire products. Notwithstanding the tendency of producers to cut prices wire manufacturers declare there is no evidence of an accumulation of wire products.

A. C. Mott Jr., superintendent of the Lansdale, Pa., plant of the Abram Cox Stove Co., was married on Oct. 30, at Germantown, Pa., to Miss Katherine Middleton. Mr. and Mrs. Mott being persons of superior discrimination, chose Chicago as one of the points to visit on their honeymoon trip, they having been at the Auditorium Hotel the past week.

The Monarch Stove & Mfg. Co., Mansfield, O., held their annual stockholders' meeting recently, and elected the following directorate: A. B. Martin, Emmett C. Baxter, R. B. Maxwell, B. A. Baxter, L. J. Bonar and J. C. Laser. The board elected A. B. Martin president, R. B. Maxwell vice president, Emmett C. Baxter secretary and general manager, and B. A. Baxter superintendent.

H. Merkel, St. Louis, Mo., manufactures gasolene lamps, his specialty in this being the making of wall lamps. Merkel's simplicity incandescent vapor light is an absolutely safe light, which does not smoke nor discolor the ceiling. This lamp has found great favor among all dealers who have once tried the same, and who have never found it wanting. This firm will be pleased to send their catalogue to the trade. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

Henry Stahl, a veteran hardware dealer, located at Elkhart, Ill., writes as follows to the Estate of P. D. Beckwith, Dowagiac, Mich.: "Words cannot express the satisfaction I am having in selling the Round Oak steel ranges. I have been in the stove business for thirty-five years, and have handled a number of good ranges, but unhesitatingly say the Round Oak steel range is the most perfect steel range I have ever seen, and since handling your range my trade has been steadily increasing, and they have been a great advertisement to my business. The workmanship, weight and handsome appearance attract much attention, and being perfectly fitted and constructed makes them bake with surprisingly small amount of fuel. Being a mechanic myself I appreciate good workmanship, and when I sell a customer one of your ranges I cannot praise it too highly."

A PERPETUAL CALENDAR.

The Reading Stove Works, Orr, Painter & Co., Reading, Pa., with offices in Philadelphia, Boston, Chicago and Buffalo, manufacturers of the Sunshine stoves, ranges and furnaces, steam heaters and hot water heaters, get out a very handsome perpetual calendar, mounted on leather embellished in gilt. By turning a crank different days of the week appear and various of this

firm's stoves are shown, such as the Golden Sunshine, Sunshine Oak, Colonial Sunshine, Othello Range, Mystic and Sunshine and Tropic Sunshine furnace. With a very commendable good taste no picture of their stove is shown in the space alloted to "Sunday," but a pretty southern scene is shown. The trade should write this firm for one of these calendars. When writing them kindly add: "Saw it in THE AMERICAN ARTISAN."

EARNINGS OF U. S. STEEL CORPORATION.

It is learned that the net earnings of the United States Steel Corporation during October were considerably above $11,000,000, or at the rate of $132,000,000 a year. If this ratio is kept up during the next 12 months the Steel Corporation will have accumulated a surplus of about $57,000,000. However, October was a record breaker in production, and the company's profits were augmented by heavy receipts from transportation. It is unlikely that the corporation will be able to maintain its November earning capacity. If its production is curtailed in consequence of the inability of blast furnaces to furnish iron, a heavy falling off in earnings can be looked for.

TALK OF NEW STEEL COMBINE.

The statement that a new steel corporation to include the principal steel plate industries of the country is being formed was confirmed Nov. 11, says the New York Commercial, by interests identified with a number of the proposed constituent plants. A director of the Tidewater Steel Co. declared that negotiations looking toward the centralization of certain steel concerns were under way, but had not progressed enough to warrant any statement bearing on details.

When asked if Jones & Laughlins, Ltd., of Pittsburg, would be taken over he replied that he was not in a position to say what companies the proposed consolidation would include. However, an attempt is being made to secure the Pittsburg plant, but what success the promoters have met with could not be ascertained today.

The belief prevails in iron and steel circles that if any combination of steel concerns is perfected the Jones & Laughlins' works will not be found in the list of subsidiary companies.

Philadelphia advices have it that the corporation will be capitalized at something like $50,000,000, but it is more than likely that the capital stock will be considerable below this figure, if Jones & Laughlins refuse to enter the combine.

Jones & Laughlins is one of the largest and most important independent iron and steel corporations in the country. It manufactures a great variety of forms of iron and steel products. It has a capital stock of $20,000,000. Its directors include B. F. Jones Jr., W. L. King, Irwin B. Laughlin, W. C. Moreland, William Lorimer Jones, Roland Gerry, J. B. Laughlin, Thomas O'Connor Jones and C. C. Briggs.

Among the other companies mentioned are the Lukens Iron Works of Coatesville; Tidewater Steel Co., Chester, Pa.; Central Steel Co., Harrisburg, Pa., and Worth Bros. Mills. These four represent an active estimated capitalization of about $10,000,000.

RELIABLE VAPOR STOVES AND RANGES.

The Schneider & Trenkamp Co., Cleveland and Chicago, send us their handsome 1902 catalogue of Reliable vapor stoves and ranges and their 15th annual catalogue of these goods. This firm are manufacturers of vapor stoves and ranges, steel ranges, combination coal and gas ranges, oil heaters, gas stoves and ranges, hotel gas ranges, gas heating stoves, gas radiators, gas parlor grates, gas hot plates, gas laundry stoves, paint burners, kitchen boiler heaters, tinners' and plumbers' furnaces, vapor and oil torches and vapor and gas ovens.

A new departure in the manufacture of vapor goods is found in the Smokeless vapor ranges. They are fitted with Reliable separate channel generator, with smokeless generating device. All cones are of large size. A sub-flame attachment on the generator keeps same constantly ready for use.

This firm make a very complete line of Process stoves and ranges. A new box frame with nickel and antique copper finish is a feature of these goods. The tank used on the Reliable line is absolutely perfect, it is claimed. All cone seats are of cast iron with large flanges that protect the drum from heat, grease and dirt. All needle points on valves are made of German silver wire. All cabinet process stoves have an extra large burner in the oven.

The No. 107 Reliable vapor stove is fitted with a 4½-inch sawed cone Giant burner No. 99 and lay-down safety tank. The box frame, with aluminum corners, with rich and antique copper trimmings, forms a beautiful combination. This stove is furnished with a very neat high shelf.

One of these catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

FOUNDRYMEN MEET.

The National Founders' Association held their fifth annual convention at the Gilsey House, New York, Nov. 13 and 14. Among the subjects discussed at this meeting were the following:

Are agreements of any character with coremakers desirable?

Is the molding machine for a complicated class of machinery castings a profitable investment, and should it be operated by molders or laborers?

Have contracts with individual employes proved of value?

Why is it that the National Founders' Association does not include every desirable membership in the country?

What policy should be pursued by the association when the molders in the employ of a member refuse to make what they call "struck work?"

Are any alliances between this association and any others organized for similar purposes desirable?

What are the advantages and disadvantages of the nonunion foundry?

Is the New York agreement fulfilling its mission or should it be in any way amended?

In what way should local associations be encouraged and how can they be made valuable assistants to the work done by the National Founders' Association?

To what extent can molding machines be profitably operated by molders rather than by laborers or "handy men" in foundries doing agricultural, malleable or light gray iron castings?

Do strikes pay?

Are union men or their leaders fair?

Is the bench molder entitled to the same minimum, the same average or the same maximum as the floor molder?

Can malleable, light, gray iron or agricultural foundries be profitable conducted under union rules?

Are we ready for the universal adoption of shorter hours, and if not, are they desirable and how should change be brought about?

Are the piece work or premium systems a profitable method of conducting a foundry doing machinery or jobbing work?

To what extent can "handy men" be profitably used in the foundry?

Are American foundrymen using every effort possible through apprentices and otherwise to increase the number of efficient molders?

Injunctions and their value.

The following officers were elected for the ensuing year: President, W. D. Sargent, of Chicago; vice president, F. T. Towne, of Stamford, Conn.; treasurer, John R. Russell, of Detroit; secretary, John A. Penton, of Detroit. H. W. Hoyt, of the Allis-Chalmers Co., Chicago, the retiring president, was presented with a costly tea service.

COST AND SELLING PRICE OF IRON AND STEEL.

The Industrial Commission, Washington, D. C., issued a special report on Nov. 10 on an investigation conducted by the commission regarding the cost and selling prices of iron and steel products from 1890 to 1901. The statement shows that in 1890 the cost of steel rails ranged from $25.93 to $34.52; in 1891, from $24.15 to $25.68; in 1892, from $22.65 to $24.82; in 1893, from $19.25 to $22.62; in 1894, from $17.79 to $21.29; in 1895, from $16.68 to $25.47; in 1896, from $17.72 to $20.69; in 1897, from $15.91 to $15.62; in 1898, from $16.67 to $17.81; in 1899, from $18.11 in January to $35.52 in December; in 1900, from $36.12 in February to $21.83 in October, and in 1901 from $21.54 to $25.98.

According to the showing made there was a margin in the selling price over the cost price for every year from 1890 up to July of 1898. In 1890 the margin ran from 73 cents to $3.50 a ton; in 1891, from $3.89 to $5.85; in 1892, from $4.68 to $7.35; in 1893, from $4.75 to $8.49; in 1894, from $2.71 to $6.21; in 1895, from $1.10 to $9.06; in 1896, from $7.31 to $10.28; in 1897, from 47 cents to $7.38. In 1898 the highest margin was $1.33, in January. In July a loss of 5 cents per ton is noted, the cost price being $17.05 as against a selling price of $17.

Again in June of 1899, when the cost price was $27.62, there was a loss of 37 cents. In July of that year the loss was $1.51 on a cost price of $29.76, $1.15 on a cost price of $32.15, and in September $1.48 on a cost price of $33.98. A loss of about $1 a ton is also reported for the months of January, February, March, April and May of 1900, when the cost price ranged over $36 a ton. Losses also are claimed on steel billets for most of the year 1900 and for the first four months of 1901.

A loss is recorded for every month in 1898 on billets. Losses are recorded for the last three months of 1900 on pig iron. The lowest cost of production for pig iron was recorded in 1894, when it was $8.65 per ton. In 1900 the cost of pig iron was $15.35. Commenting in a general way the commission says:

"Beyond question there have been steady improvements in the methods of manufacture tending to reduce the cost of labor and incidentals per unit of product. On the other hand, the advance of wages from 1899 to 1901, especially as compared with the years immediately preceding, no regard to which has been given in making up the figures, may in part have offset the reduction through such improvements.

HEY, RUBE.

There was a real "Rube" in our sanctum. He had the ill-fitting coat, fringe of sprawley whiskers, astonished eyes, opened mouth, rusty silk hat, vintage of 1888, and hayseed in the hair that mark the argriculturalist one sees on the vaudeville stage. This bucolic visitor came to us from W. H. Colebrook Sons & Co., Syracuse, N. Y., H. A. Granbery & Co., 413 Central avenue, Cincinnati, and Chas. Smith Co., 122 Lake street, Chicago, selling agents. This card also advertises the Black Flag stove polish benzine paste.

We do not have this card any more, as we gave it to a poor but honest bunco steerer, who is earning a respectable living by selling The Consolidated Oil Gusher & Wireless Telephone & Telegraph first preferred stock. This agreeable gentleman told us that he wanted this card to put upon his bureau so he could see this picture of a simple-minded ruralite the last thing before he went to bed. He said it would give him pleasant dreams. Dealers can secure one of these amusing advertising cards by writing this firm. Kindly add: "Saw it in THE AMERICAN ARTISAN."

CHICAGO HARDWARE BOWLING LEAGUE.

The standing of the teams in the Chicago Hardware Bowling League is as follows:

	Won.	Lost.	Per Cent.
Hibbard, Spencer, Bartlett & Co.	14	1	933
Vaughn & Bushnell Mfg. Co.	12	6	667
Geo. B. Carpenter & Co.	10	8	556
H. Channon Co.	8	10	444
Orr & Lockett Hardware Co.	6	9	400
Crerar, Adams & Co.	5	10	333
C. Sidney Shepard & Co.	5	10	333
W. D. Allen Mfg. Co.	6	12	333

The Hardware Record.

American Hardware Manufacturers Association.

Pres., Fayette R. Plumb, Philadelphia.
V.-P., Samuel Nicholson, Providence.
2d V.-P., C. S. Van Wagoner, Cleveland.
3d V.-P., F. S. Kretzinger, Fort Madison, Ia.
Secy-Treas., F. D. Mitchell, Pittsburg.
Ex. Com., Robert Garland, Chairman, Pittsburg; Henry B. Lupton, Pittsburg; N. A. Gladding, Indianapolis; W. S. McKinney, Pittsburg; Samuel Disston, Philadelphia; C. E. Adams, Cleveland; Jas. Kelly, Alexandria, Ind.; J. C. Birge, St. Louis.

Arkansas Retail Hardware Dealers' Association.

Pres., John M. Pitman, Prescott.
1st V.-P., J. F. Maxey, Ozark.
2d V.-P., T. B. Stewart, Newport.
Secy-Treas., J. A. Plummer, Marianna.
Executive Com.: H. Williams, Hot Springs, J. H. Boicourt, Little Rock, J. W. Lee, Fordyce.

Chicago Retail Hardware Dealers' Association.

Pres., D. McLaughlin.
V.-P., H. E. Gnadt.
Sec., G. R. Lott.
Collector, John Hora.
Treas., J. L. Smith.

Hardware Merchants' and Manufacturers' Association of Philadelphia.

Pres., Hugh McCaffrey.
V.-P., Wm. C. Peters.
Sec.-Treas., T. James Fernley.
Directors, William W. Supplee, Samuel Disston, John H. Griffith, James H. Ritter, William C. Peters, Thomas Devlin, Fayette R. Plumb, Hugh McCaffrey and T. James Fernley.

Illinois Retail Hardware Dealers' Association.

Pres., H. G. Cormick, Centralia.
V.-P., Wm. Bittel, Peoria.
Sec., G. R. Lott, Chicago.
Treas., F. F. Porter, Chicago.
Ex. Com., Z. T. Miller, Bloomington; W. T. Gormley, Chicago; H. N. Murphy, Galesburg; C. Mauer, East St. Louis; C. Williams, Streator; L. Babst, Kankakee.

Indiana Retail Hardware Dealers' Association.

Pres., W. P. Lewis, New Albany.
V.-P., Jas. L. Hutton, Portland.
Sec. and Treas., M. L. Corey, Argos.
Members Ex. Com., I. A. Sibley, South Bend; E. M. Bush, Evansville; W. H. Weed, Vincennes.

Indian Territory Retail Hardware Association.

Pres., Geo. W. Mowbray, Tulsa.
1st V.-P., J. G. Smith, Canadian.
2d V.-P., Fred Parkinson, Wagoner.
Sec., Dick Miller, Poteau.
Treas., Sam R. Frazee, Vinita.

Iowa Retail Hardware Dealers' Association.

Pres., W. A. McIntire, Ottumwa.
V.-P., E. G. Penrose, Tama.
Sec., C. W. Brelsford, Villisca.
Ex. Com., A. C. Heyman, Miles; L. Lindenberg, Dubuque; F. S. Narum, Waukon; E. G. Penrose, Tama; W. A. McIntire, Ottumwa; L. H. Kurtz, Des Moines; H. A. Cole, Council Bluffs; Harry Vincent, Ft. Dodge; W. H. Miller, Cherokee; M. W. Keating, Afton; Jacob Seither, Keokuk.

Kansas Hardware Dealers' Ass'n.

Pres., Geo. F. Andersen, St. Marys.
V.-P., Oscar Roehr, Topeka.
Sec., J. A. Cole, Topeka.
Ex. Com., James H. Hamilton, Arkansas City; E. I. King, Logan; T. H. Kiniry, Beloit; J. M. Walters, Robinson; F. W. Bartlett, Kansas City.

Kentucky Retail Hardware and Stove Dealers' Association.

Pres., Geo. Dehler, Louisville.
1st V.-P., J. S. Ogden, Ashland.
2nd V.-P., Chas. D. Winn, Paris.
Sec., Paul Wagner, Louisville.
Asst. Sec., Wm. Dehler, Louisville.
Treas., Henry Heick, Louisville.

Michigan Hardware Association.

Pres., H. C. Minnie, Eaton Rapids.
V.-P., Geo. W. Bruske, Saginaw.
Sec., Fred H. Cozzens, Detroit.
Treas., Henry C. Weber, Detroit.
Ex. Com., Samuel Winchester, Jackson; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marion City; James J. Potter, Alpena; Jno. W. Jochin, Ishpeming; Robt. G. Chandler, Coldwater; John Popp, Saginaw; F. S. Carlton, Calumet.

Minnesota Retail Hardware Association.

Pres., W. H. Tomlinson, LeSueur.
V.-P., H. S. Cleveland, Minneapolis.
Sec., T. McCracken, Minneapolis.
Treas., G. M. Evanson, St. Peter.
Ex. Com., F. H. Hunt, Red Lake Falls; B. J. Kernkamp, St. Paul; Julius Schmidt, Wabasha; W. H. Tomlinson, LeSueur; A. C. Hatch, Battle Lake; Jos. Mason, St. Peter; Chas. F. Ladner, St. Cloud; S. R. Nelson, Owatonna; E. H. Loyhed, Faribault.

Missouri Retail Stove and Hardware Dealers' Association.

Pres., B. F. Naylor, Marshall.
V.-P., Geo. R. Plowman, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., R. L. Hixon, Hannibal; F. A. Kannsteiner, St. Louis; J. W. Poland, Carrollton; W. A. Wingert, Kansas City.

National Hardware Association.

Pres., R. A. Kirk, St. Paul.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Sec.-Treas., T. James Fernley, Philadelphia.
Ex. Com., W. K. Belknap, Louisville; Samuel A. Bigelow, Boston; P. E. Strauss, Boston; J. D. Moore, Birmingham; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. W. Shapleigh, St. Louis.

National Retail Hardware Dealers' Association.

Pres., W. P. Lewis, New Albany, Ind.
V.-P., Geo. Hubbard, Flint, Mich.
Sec., M. L. Corey, Argus, Ind.
Treas., H. T. Helgeson, Milton, N. D.
Ex. Com. Z. T. Miller, Bloomington, Ill.; Fred Neudorff, St. Joseph, Mo.; I. A. Sibley, South Bend, Ind.; H. A. Cole, Council Bluffs, Ia.; H. G. Cormick, Centralia, Ill.

North Dakota Retail Hardware Dealers' Association.

Pres., H. T. Helgesen, Milton.
V.-P., H. N. Joy, Hamilton.
Treas., W. H. Pinkerton, Lakota.
Sec., C. N. Barnes, Grand Forks.
Ex. Com., H. Harrington, Fargo; W. W. Jamieson, Wahpeton; H. F. Strehlow, Casselton; I. L. Newgard, Grafton; H. B. Allen, Jamestown; H. A. Mae, Church's Ferry.

Ohio Hardware Association.

Pres., O. M. Scott, Marysville.
V.-P., W. P. Bogardus, Mt. Vernon.
Cor. Sec., Geo. Gray, Coshocton.
Fin. Sec., Will C. Jones, Columbus.
Treas., H. G. Woodward, Sidney.
Ex. Com., Geo. B. Meyer, Cincinnati; Geo. V. Guyton, Ada; H. F. Rahe, Cleveland; J. Rohrbacher, Akron; A. H. Strome, Warsaw; Frank Winters, Lancaster; James B. Carson, Hamilton; R. Brown, Washton Court House.

Philadelphia Hardware Association.

Pres., Julius M. Att.
V. P., C. F. Geissler.
Sec., T. B. Hendrickson.
Treas., Edwin H. Shannon.
Trustees, Frank Schmidt, Aaron I. Sansom, Jr., Lewis C. Glading.

St. Louis Stove Dealers' Ass'n.

Pres., F. A. Kansteiner.
1st V.-P., Aug. Steinmeyer.
2d V.-P., Aug. Gruendler.
Sec., A. F. Geschwindner.
Treas., L. J. Boehl.

Southern Hardware Jobbers' Ass'n.

Pres., J. D. Moore, Birmingham, Ala.
1st V-P., F. A. Heitman, Houston, Tex.
2d V.-P., Bruce Keener, Knoxville, Tenn.
Sec., C. B. Carter, Knoxville, Tenn.
Ex. Com., W. M. Crumley, Atlanta, Ga.; O. B. Barker, Lynchburg, Va.; Chas. H. Ireland, Greensboro, N. C.; B. F. Eshleman, New Orleans.

Texas Hardware Jobbers' Ass'n.

Pres., F. A. Heitman, Houston.
1st V.-P., J. C. Bering, Houston.
2d V.-P., Ed. Strauss, Waco.
Sec.-Treas., Robert Eikel, Houston.
Ex Com., Jas. Moroney, Dallas; R. F. Bell, Weatherford; W. L. Sanford, Sherman; A. E. Goeth, Austin.

Wisconsin Retail Hardware Dealers' Association.

Pres., John Hessel, Antigo.
V.-P., Otto Schlafer, Appleton.
Sec., C. A. Peck, Berlin.
Treas., George Leverenz, New Holstein.
Ex. Com., Henry Droegkamp, Milwaukee; Arthur Heins, Tigerton; E. H. Ramm, New London; J. Wilkie, Fond du Lac.

Gilbert L. Wells has sold his interest in the Fulton Knife Co., Fulton, N. Y., to William Marvin.

The Spencer Mfg. Co., South Indianapolis, Ind., are putting up a factory for the manufacture of hardware specialties.

The Stanley Rule & Level Co., New Britain, Conn., are putting up two new buildings, a factory 84x31 feet and a pumping station 27x28 feet.

The New England Hardware Dealers' Association held their monthly meeting at the United States Hotel, Boston, Wednesday, Nov. 13, at 5 p. m.

Thursday, Nov. 14, a disastrous fire occurred in the building at 254 Madison street, Chicago. Among the occupants of the burnt building was Harry L. Weisbaum, dealer in cutlery, whose loss is $7,000.

Gray & Bennett have opened up a new hardware store at Flandreau, S. Dak. They will do a general hardware business, heating and ventilation and would be pleased to receive catalogues of different goods.

The Smith-Warren Co., 143 Federal street, Boston, Mass., send us a circular calling attention to Smith's fire-proof metal windows. These windows are neat in appearance and cost less than common windows with fire shutters.

The Bronson-Walton Co., Cleveland, O., makers of coffee mills, roasting pans and hardware specialties, have moved into their new plant, which has been building during the summer. They have added new machinery which will double their capacity. They report plenty of orders and are running a night force.

Geo. W. Hoffman, 295 E. Washington street, Indianapolis, Ind., sends us a circular calling attention to the "Bar-keepers' Friend," a metal scourer and polish for scouring, cleansing and polishing bar fixtures, drain boards and all tin, zinc, brass, copper, nickel and all kitchen and plated utensils, glass, wood, marble, porcelain, etc. It may be applied dry, in powdered form, in paste, from a pan, or, suitably dissolved, in liquid form. Hoffman's "U. S." metal polish is most useful for dining room, kitchen ware, jewelry and all embossed or engraved ware. The fluid polish is put up in 4-ounce bottles, 8-ounce cans, screw top 1-quart and 1-gallon cans.

Charles Morrill, 277 Broadway, New York, sends us a catalogue showing his line of saw sets, bench stops, wire-cutting nippers, Universal punches and car-seal presses. In the Morrill saw set No. 95 the revolving anvil with the indicator is subdivided and marked with figures, these showing the number of teeth to the inch in the saw to be set. Morrill's saw set No. 10 is designed for hand, band, jig, scroll and fret saws, from the largest made down to 3-16 inch wide. Morrill's Universal punch utilizes a cam and lever and introduces a new mechanical principle in tools of this kind. It will perforate, with a slight grip of the hand, any thickness from tissue to one-quarter of an inch of leather. His No. 2 metal punch, for sheet metal, has been improved to punch sheet metal from the thinnest up to No. 14 gauge. There are 7 sizes, and they can be made to punch holes varying from 1/8 to 5-16 of an inch in

diameter—copper, brass, iron or steel. Morrill's new bench punch is provided with interchangeable dies and plungers, varying in size from 1/8 to 3/8 inch in diameter. The tool is made of the best iron and steel, and is designed for punching sheet metals, cardboard paper and other fibrous material. There is a gauge secured by a set screw which permits regulation of the space between the edge and the dies. One of these catalogues showing this useful line of tools will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

KENTUCKY ASSOCIATION GAINING MEMBERS

Paul Wagner, Louisville, secretary of the Kentucky Retail Hardware and Stove Dealers' Association, advises us in a recent favor that he is hard at work trying to increase the membership of the association to 100 by Jan. 1. He has recently sent out 400 letters to dealers throughout the state, and is securing many favorable responses.

MEETING EXECUTIVE COMMITTEE OHIO HARDWARE ASSOCIATION.

A meeting of the Executive Committee of the Ohio Hardware Association has been called by President O. M. Scott, to meet at the Chittenden Hotel, in Columbus, on Nov. 19, 1901, at 10 a. m., to lay plans for the coming convention.

The officers of the association are desirous that this shall be the best meeting that they have ever held, and hope all the members will work to that end. The association is getting out a neat little booklet containing the names of the members in alphabetical order, the names of the officers, constitution and by-laws, and also a list with the names of the towns in alphabetical order.

GRINDSTONES.

We all know Benjamin Franklin's story of the man who, with honeyed words, induced him to turn the grindstone because "he had an axe to grind," and after the job was done changed his tune. The small boy is rapidly being eliminated as the motive power of grindstones bi-treadle and other methods of applying foot power superseding the old method. However, we do not hear of any organized opposition to improved methods of grindstone construction at the hands of small boys whose labor has been displaced in the march of progress, although in other fields of industry labor-displacing machinery has been introduced amid strikes, riots, etc.

The use of grindstones is increasing. The intense demand of the age for economy in production has resulted in close investigation of every item of labor. The farmer and manufacturer, mechanic and stockholder all realize that where a man is to work two hours with a specified implement, be it mowing machine, butcher knife, sickle or axe, he can do much better work if he spends 15 minutes in sharpening his implement and one hour and 45 minutes in working, than if he worked two hours steadily without sharpening his tools.

The Cleveland Stone Co., Cleveland, Ohio, quarry thousands of grindstones daily, but they find that the demand equals the supply. This firm have quarries at the following points, viz.: Berea, O.; Kipton, O.; Elyria, O.; Vincent, O.; Columbia, O.; Wakeman, O.; Marietta, O.; Peninsula, O.; West View, O.; Brownhelm, O.; Vermillion, O.; Constitution, O.; Morris Hill, O.; Nickel Plate, O.; Independence, O.; Olmsted Falls, O.; North Amherst, O.; Boaz, W. Va.; Port Austin, Mich., and Grindstone City, Mich.

This firm are prepared to furnish grindstones in any quantities and of suitable grits for every variety of grinding. Their quarry properties are said to be the choicest holdings of the kind in the country, and this firm are the only makers of the popular Berea and Lake Huron grindstones. Their facilities are as complete as money and experience can provide, and the most painstaking care is exercised throughout their various departments. All this firm's loose stones are made with parallel sides. They will pile flat and firm and are not liable to breakage when stacked or stored.

This firm are sending out a very attractive catalogue, giving a great deal of interesting grindstone data and showing a large number of half-tone photographs of their various quarries and also the process of grindstone manufacture. One of these booklets will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

YANKEE SPIRAL RATCHET SCREW DRIVER.

North Bros. Mfg. Co., Philadelphia, are manufacturers of a line of screw drivers, one of which is shown herewith.

The Yankee spiral ratchet screw driver No. 30 is made right and left hand and is rigid.

The change from right to left hand for either push or ratchet is made by simply moving the slide

Spiral Ratchet Screw Driver, Right and Left Hand and Rigid.

to either end of the slot. The ratchet movement can be used in any part of the length of tool for either right or left hand. When slide is placed in center of slot the rod is held rigidly and tool can be used as an ordinary screw driver, and this at any point in length of rod. When extended, this gives a very long screw driver. This feature of using as a ratchet or as a rigid screw driver at any part of its length is not found in any other tool of this kind, it is claimed.

The construction of ratchet and pawls permits of a very compact arrangement, making the tool convenient in size and of light weight, yet stronger in these vital points than any similar tool now made. Neither pawls nor ratchets can bend, break or get out of order. The friction in ratchet mechanism is so slight as to be hardly felt.

The nuts working in spiral are of brass and with the spiral grooves in rod are so designed that the wear has been reduced to a minimum.

The chuck for holding the bits is simple in construction and positive in its hold on bits.

THE HESS RASP CUTTING MACHINE.

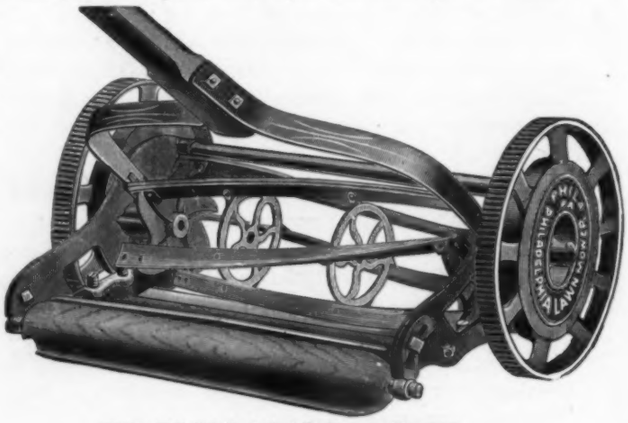
File manufacturers, or those contemplating taking up the manufacture of rasps, will be interested in the rasp cutting machine here shown and recently placed on the market by the Hess Machine Works, 25th and Callowhill streets, Philadelphia, Pa. The machine is designed to cut a rasp after the style of a hand-cut rasp. The rows of punchings are staggered, so that looking lengthwise of a rasp no two punch marks seem to be in line, and the teeth or punchings do not therefore follow in the tracks of each other. Rasp users will no doubt appreciate this style of cutting, which prevents the furrows or grooves following the use of rasps having the teeth in line.

Hess Rasp Cutting Machine.

The machine is simple in construction, and easily operated. The cutting is regulated by a pattern chain, three sizes of which go with each machine. The main shaft bearings are bushed with phosphor bronze, and all wearing parts are made of best tool steel. All surfaces are scraped to surface plates and provided with gibs to take up wear. The machine is patented in the United States and foreign countries. This firm would be pleased to send one of their catalogues to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

PHILADELPHIA LAWN MOWERS.

The accompanying cuts show a couple of styles of the Philadelphia lawn mowers, manufactured by the Philadelphia Lawn Mower Co., 3107-3109 Chestnut street, Philadelphia, viz., style XX and style N. The former is a mower with 12-inch wheels, 7-inch cylinder and five blades, as shown in our illustration, is, perhaps, the most noticeable. This machine has a single pinion and is geared on both sides. It is made in sizes up to 22 inches, and is especially designed for cutting high grass, and has been amply tested for this purpose, proved perfectly satisfactory. In most cases this mower will be worked by two men, one to push and the other to pull with a rope. It is, however, easily worked by one man on ordinary lawn grass.



Style XX Philadelphia Lawn Mower.

The other new mower is style N, also here shown. This mower is made in sizes up to 20 inches, have five blades, 10-inch wheel, 6½-inch cylinder, single pinion and is geared on both sides. It has also a new patented lever box cap attachment, which is placed on the revolving cutter journals on the inside of driving wheel, for taking up the wear of the journals and doing away with set screws; also practically making the mower noiseless. Adjustment is made by means of a bolt, the nut to which is on the side frame and easy of access.

Style N Philadelphia Lawn Mower.

The makers point out that no mower will work satisfactorily with the journal loose in the box caps. When writing for a copy of this catalogue mention THE AMERICAN ARTISAN.

SLOJD KNIFE.

The accompanying cut shows a slojd kindergarten or carpenters' bench knife, offered the trade by the Smith & Hemenway Co., 296 Broadway, New York City, and used extensively in Europe for wood carving and carpenter work. The manufacturers state that this tool is forged from the finest quality of Swedish razor steel, and no carpenter's tool chest or mechanical school building is complete without it. They have created a demand for this article in the last five years which has far exceeded their most sanguine expectations. They make this knife in three different sizes, 2½ inch, 2¾ inch and 3½ inch blades. The handles are practically the same size. The knife has a very heavy swaged blade which is desirable for wood carving purposes. This firm would be pleased to send sample and prices to the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

Slojd Knife.

NEW PAINT COMPANY.

Incorporation papers have been taken out for a paint company, known as the Orr, Dean & Barry Co., Coshocton, O. The officers of this company are: President, Oliver Orr, Columbus, O.; vice president, Geo. M. Gray, Coshocton, O.; secretary, Geo. Barry, Columbus, O.; treasurer, H. Clay Dean, Columbus, O.; superintendent, B. B. Naylor, Columbus, O.

Mr. Orr was one of the original owners of the Orr & Abbott Paint Co., which was established in Columbus in 1879. Mr. Clay Dean has been the traveling salesman for the Orr, Brown Price Wholesale Drug Co., of Columbus, for the past thirteen years. Mr. Barry has also been traveling for this company for the past eleven years. Mr. Naylor is a practical paint maker, and has had a wide experience. Mr. Geo. M. Gray is engaged in the retail and wholesale hardware business in Coshocton, O., and is secretary of the Ohio Hardware Association. This company will continue to manufacture the celebrated "High Grade" liquid paint that has been on the market for a number of years. Everything is being made ready and the salesmen will start out on the road within the next few weeks.

NULITE INCANDESCENT VAPOR GAS LAMPS.

The Chicago Solar Light Co., 132-134 Lake street, Chicago, send us a little circular describing their Nulite incandescent vapor gas lamps. The "Nulite" burner is one solid bronze casting made of a special mixture to retain and conduct the heat. They have no joints to warp and get out of order and there is no possible chance of clogging. They are provided with an automatic cleaning device and produce heat enough to generate perfectly without sufficient heat to carbonize. The gas is generated in a tube attached to the burner. This tube is packed with a copper cable, which conducts the heat. These lamps burn about 94 per cent of air and 6 per cent of hydro-carbon gas, furnishing a very pure, steady and strong light. The Nulite 750 candle power arc illuminators have acquired a high reputation for ligting stores, halls, churches, public buildings, etc. These lights cost less to operate than common coal oil lamps. This firm would be pleased to send their trade literature to dealers on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

HARDWARE AT THE HUB.

The Bigelow & Dowse Co., Boston, Mass., send us a copy of their latest handsome catalogue. This volume is 8½x11 inches in size and contains 550 pages. It is bound in green Morocco, and contains a line of hardware particularly adapted to the requirements of the New England trade. It is also a valuable book of reference and price book for buyers. This first volume is issued in advance of this firm's full and complete catalogue, which will contain 1,200 or more pages, and will be issued early in 1902. This volume is neatly gotten up, each page showing handsome rule work. The line of goods shown is very complete and comprises builders' hardware, sewing machines, etc. Among the specialties shown in this volume are the Bommer floor hinge, Blount door check and spring, Bantam ball-bearing hangers, Payson anti-friction casters, Loxit sash balances, Bailey's adjustable iron planes, New Century sewing machine, Aetna dynamite, Newfoundland liquid glue, etc.

BUSINESS CHANGES.

NEW FIRMS.

Bentonville, Ark.—The McAndrew Hardware Co.
Juniata, Neb.—D. R. Ball & Son.
Elburn, Ill.—Anderson & Warne.
Albany, N. Y.—Waterman Hardware Co.
Nampa, Idaho.—Malpus & Moore.
Foley, Minn.—Harry Bouck.
Appleton, Wis.—George Schierdermayer.
Graveville, Minn.—O'Neill & Gilmer.
De Forest, Wis.—Robert Heisig.
Roanoke, Va.—The Fairfax Roberts Hardware Co.
London, Minn.—Sherman Hyatt.
Aberdeen, S. D.—Keane & Champlin.
Otisville, Wis.—J. O. Nelson.
Aberdeen, S. D.—R. L. Champlin and W. J. Keane.
Atchison, Kan.—J. M. Hull.
Cameron, W. Va.—Cameron Hardware Co.
Fulton, Mo.—The Judt-Craghead Hardware Co.
Jackson, Miss.—Thos. McClelland.
Mobile, Ala.—Dorgan-Goodbrad Hardware Co.

New London, Iowa.—W. W. Cunningham & Co.

Roanoke, Va.—The Fairfax Roberts Hardware Co. have leased the Wood building, on State street, and will establish a wholesale hardware house in Bristol, about the 15th of January next.

CHANGES.

Farmer City, Ill.—Richard & Haas are succeeded by P. L. Harper and O. E. Holmes & Son.

Brodhead, Wis.—Russell P. Johnson, of Darlington, succeeds Broderick & Marshall.

Ray, Ind.—J. R. Duguid has disposed of his stock to Theodore Naughton, who will take possession January 1.

Atlantic, Iowa.—D. K. Eby has purchased the stock of Wilcox Bros. and has taken possession.

Grand Rapids, Wis.—The stock of hardware of Gitchell & Lubeck was sold by the trustee, W. E. Wheeler, to N. Reiland and Nathan Church.

Manila, Iowa.—It is reported L. E. Anthony has purchased the stock of P. Hoffheims and will take possession in the near future.

Connersville, Ind.—W. E. Beckett has sold his interest to his partner, W. G. Starr, who will conduct the business alone.

Corpus Christi, Tex.—Randolph Robertson has disposed of his interest in the establishment to Frank Goshorn.

Irenton, Ky.—G. E. Garth & Co. succeeds Garth & Riley.

Hillsboro, Tex.—W. R. Lang & Co. are succeeded by Lang, Knight & Co.

Columbus, Ga.—Columbus Hardware Co. are succeeded by Polk & Harris, but the firm name will not be changed.

Fergus Falls, Minn.—It is reported that Marue & Reinhart have dissolved, H. Marue continuing.

Ganne Valley, N. D.—M. C. Pease has sold out to F. A. Metcalf.

Canistota, N. D.—Scott & Haden are succeeded by Scott & Uecker.

Maxwell, Wis.—O. B. Alderman & Son succeed I. K. Wilson.

Cortland, Neb.—J. F. Reller has sold out to H. H. Burling.

Newport, Neb.—C. J. Reynolds succeeds J. C. Bender.

Monroe, N. Y.—Smith & Strehl succeed John D. Bonton.

Beloit, Wis.—Murdock-Dunwiddie Co. are the successors of the Frederick Hardware Co.

Arrington, Ill.—G W. Cruse and Bert Strowd succeed W. H. Davidson.

Bird Island, Minn.—A half interest has been purchased in the Bird Island Hardware Co., by Frank Poseley.

Congerville, Ill.—F. McCullough and B. Sharp succeed J. N. Bobzen.

Cambridge, Iowa.—Cole Bros. succeed J. M. Bartlett in the hardware business.

Chapman, Kan.—The Chapman Hardware Co. are succeeded in the hardware business by D. F. Erwin.

Clyde, Ohio.—W. C. Starr has sold his interest in the hardware business to his partner, C. W. Arner, and the firm of Starr & Arner will be dissolved as soon as the invoice of stock is taken.

Corpus Christi, Tex.—Randolph Robertson, of the firm of Bluntzer, Robertson & Co., hardware dealers, has disposed of his interest to Frank Goshorn, formerly of Houston. The original firm name will be retained.

Franklin, Tenn.—W. H. Berry has disposed of his interest in the hardware business to his partner, D. A. Hatter.

Payne, Ohio.—The Countryman stock of hardware, at Haviland, has been sold to Sullivan & Malloy.

Prospect, Ohio.—S. Niemeyer Hardware Co. has disposed of its stock of hardware to C. E. Dix & Son, of Marion.

Shippensburg, Pa.—W. A. Cox, of East Main street, has disposed of his stock to J. W. McPherson & Sons, who will continue the business as a branch store of their well-known establishment.

Toledo, Ohio.—The Norton Hardware Co. has been reorganized and merged into the Norton Paint & Hardware Co. Articles of incorporation were taken out, with a capital stock of $50,000. The incorporators are Messrs. William H. Norton. Herbert S. Norton, C. Ralph Norton, Frank H. Greer and Attorney Harry W. Lloyd. The new company will meet shortly and elect officers.

Vermillion, S. D.—Hanson & Dorr, prominent hardware merchants have disposed of their hardware business to E. D. Hawkins.

Wardner, Idaho.—A. J. Knight, one of the firm of Greer & Knight, has sold his interest to his partner.

West Somerville, Mass.—The old-established hardware store of W. L. Snow has changed hands. Its new proprietor is Albert Vanderhoof, who has been in the hardware business for thirtyyears, and now has a well-established business.

Yates City, Ill.—J. W. Wood is succeeded in the hardward business by William Miller, his stock invoicing $4,500, and he has taken possession.

STOPPAGES.

Front Royal, Va.—Business will be discontinued by the Hemp Hardware Co.

Norfolk, Va.—W. T. Owen is reported as sold.

Carrollton, Ky.—An assignment has been made by C. D. Saylers.

Lake City, Minn.—It is reported that the Richardson Hardware Co. have sold out.

MISCELLANEOUS.

Green Isle, Minn.—F. D. Moskop, it is reported, is trying to sell out his business.

Beardstown, Ill.—William Frey, fire.

Braddyville, Iowa.—Fine & Maxwell, fire.

Braddyville, Iowa.—Holton & Gray, fire. Loss, $14,000; insurance, $9,400.

Biloxi, Miss.—Biloxi Hardware Co., fire.

Camden, N. J.—Klosterman Bros., fire.

Carbondale, Ill.—John Stoelz & Bro., fire. Loss, $60.

Charlotte, N. C.—Charlotte Hardware Co., fire. Loss, pistols, etc.

Cohocton, N. Y.—Smith & Barnell, fire. Loss, $1,500.

Hebron, Ohio.—Amos Atwood, fire. Loss, $5,000.

Junction City, Ark.—Union Hardware Co., fire. Loss, $4,000.

Kahoka, Mo.—Woodruff Bros, fire. Loss, $5,000; insurance, $3,000.

Lebanon, Pa.—C. Oscar Bressler & Co., fire.

Malden, Mass.—A. A. West, fire.

Keene, N. H.—The Spencer Hardware Co. move.

Newbern, N. C.—P. M. Draney moves.

Brookhaven, Miss.—E. M. Price & Co.

Cleveland, N. Y.—E. S. Laranay.

Comanche, Tex.—Fred Grimm.

Fort Worth, Tex.—H. L. Lathrop.

Mansfield, Tex.—W. L. Hutcheson.

Mexico, Mo.—V. O. P. King.

Monticello, Ind.—William Million.

New York, N. Y.—Samuel Nafew.

West Point, Ga.—Frank Adams.

Fond du Lac, Wis.—Wilkie Hardware Co., burglarized.

Gladwin, Mich.—Fraser & Button, burglarized.

McKenzie, Tenn.—Marshall & Hamilton, burglarized. Loss, guns, etc.

Mt. Joy, Pa.—John H. Buohl, burglarized. Loss, $500.

New Orleans, La.—A. Baldwin & Co., burglarized. Loss, revolvers and razors.

North Yakima, Wash.—D. R. Borton, burglarized. Loss, $75.

Pawtucket, R. I.—A. F. & F. Bray, burglarized. Loss, $100.

Pleasantville, Ohio.—Rowles Bros., burglarized.

Syracuse, N. Y.—Spalding & Co., burglarized. Loss, $25.

Wyoming, Pa.—Arthur Shoemaker, burglarized. Loss, $75.

Brandon, Man.—Johnson Hardware Co., fire.

Dougherty, Iowa.—Morgan & Co., fire. Loss, $8,000; insurance, $6,000.

Galien, Mich.—E. S. Babcock, fire. Loss, $1,300.

Johnsonville, Tenn.—James R. Brockus, fire. Loss, $2,000; insurance, $1,500.

Knoxville, Iowa.—Vandrimmelin & Co., fire. Loss, $5,000; insured.

East Aurora, N. Y.—E. E. Henshaw has been remodeling his show room and is putting in a line of light hardware.

Heating and Ventilating.

A. B. Barr & Co., Yonkers, N. Y., are a new steam and furnace heating firm.

G. A. Pratt & Co., a steam heating firm located at 139 West 24th street, New York, has been sold out by the sheriff. This firm was incorporated on December 26, 1899, with a capital stock of $20,000, which was increased to $50,000 August 1, 1900.

The Kansas City Furnace Pipe Co., 1209 W. Ninth street, Kansas City, Mo., advise us that their concern is a corporation organized for the purpose of manufacturing furnace pipe and fittings, jobbing furnaces, registers and furnace supplies. They have been in operation only about two or three months, but are getting along very nicely, and the prospects are very good for a successful business.

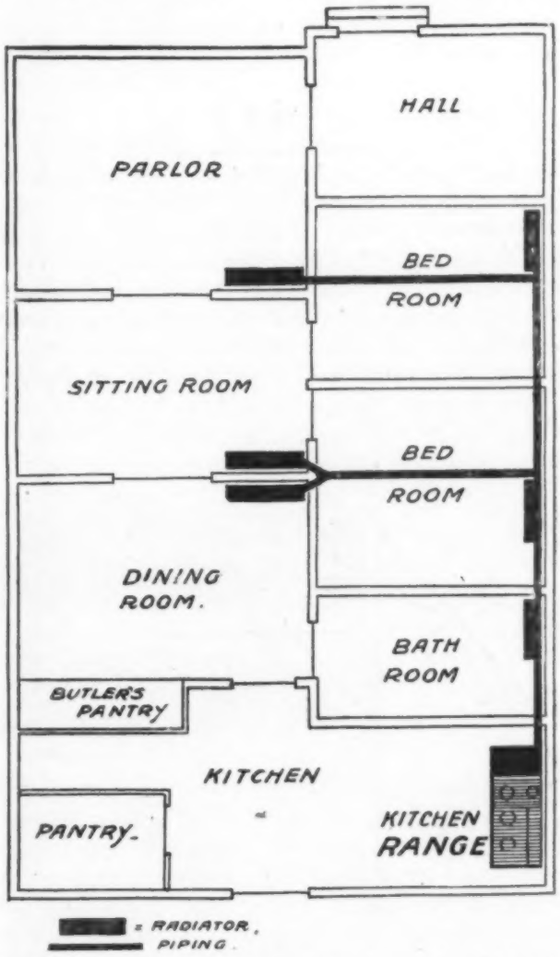
The American Radiator Co., Lake and Dearborn streets, Chicago, send us a little circular calling attention to the O. S. distributers, which are proportioned and constructed on practical and scientific principles. Their use saves labor, fittings and joints; also, the unnecessary cutting of floors and beams. The O. S. circuits are especially devised to distribute the flow equally to all risers or first floor radiators direct from main circuit in cellar.

HEATING BY HOT WATER FROM KITCHEN BOILER.

BY JAMES J. LAWLER.

The floor plan which we show here is that sent in by ou subscriber, "Fitter," of Chicago, Ill., which appeared in THE AMERICAN ARTISAN of Sept. 21st. He wishes to know if he can heat a whole house by hot water from the water back in the kitchen range, and, while he gives no information on which to base calculations, as it is not stated what the size of the house is, it is easy to answer his first question, and by only one word, no. But, notwithstanding the fact that he gives practically no information, simply a floor plan without measurements, which means very little, he goes further and says: "If this will not work give me your reasons." Now in such cases as these we become, practically speaking, mind readers, as we have nothing tangible on which to base proper answers of value to the trade, which is our aim in this, as well as all other departments of THE AMERICAN ARTISAN. This is a case where a person asks very little, but expects a great deal, and yet we can all learn something from such questions, and the gentleman who asked the above questions will undoubtedly learn something from this answer that he will never forget, and not alone in matters pertaining to the heating of a house by hot water, but of things in general.

Coming back to the original question, the first thing to know when we are calculating on heating a room by steam or hot water is the size of the room, its cubical contents, also its exposed wall surface, as well as the size and number of windows, and each room in the house should be figured in this way, and, as will be seen, no size or capacity of any room is given, hence it would be impossible for us to tell the proper size of the radiators for any room, yet there is one thing that we can tell in connection with this problem, even without measurements, and that is that one of the bed rooms or the bath room will be as much as can be warmed by the water back of the kitchen range, hence the job as laid out by our subscriber is not practical. After we find out the amount of radiating surface we require to warm any certain room or space, the next thing for our consideration is the capacity of a heater to supply the radiation, and that is the reason why there is hot water boilers of various capacities. But the size of the water back in the average kitchen range is the same, which contains, all told, about one square foot of surface which comes in contact with the fire; this, therefore, has its capacity for heating which cannot be increased. And if connected with a forty-gallon boiler there will



be little heat to spare for warming rooms, and in this case we would not recommend the heating of more than the bath room by this method, as the bath room is nearest the range, and even to do this successfully requires a knowledge of circulation which cannot be shown on a floor plan. If our subscriber concludes to warm the bath room of his customer's house from the kitchen range, and requires further information, we shall gladly comply with his request if he will give us the size of the bath room and water back in range, as well as the size of kitchen boiler.

Frank E. Tyler, of Tyler & Bennett, Albany, N. Y., tinsmiths, has filed a petition in bankruptcy.

Tinshop.

PATTERN FOR MEASURE WITH LIP.

TO THE AMERICAN ARTISAN.

I send herewith pattern for a measure with lip. Fig. 1 represents the measure with lip required. Fig. 2. Draw X Y and lines A B and C P at right angles to it, making distance A C equal to dotted line A B, Fig. L. On line A B Fig. 2, lay off from A to M one-half diameter of top of lip, which is distance C B,

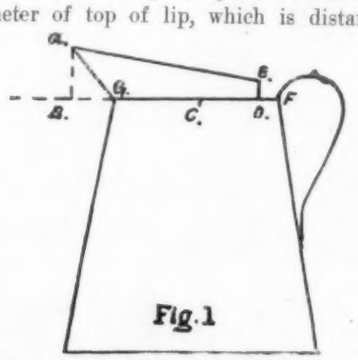


Fig. 1

Fig. L. On line C P lay off from C to M one-half diameter top of measure, which is distance C G, Fig. 1. Draw line through M and N until it intersects X Y at L. Now with L as center and radii L N strike arc G H I. Span dividers C N and span twice on arc each side of point H, which will locate points G and I. Make G D and I T equal to E D, Fig. 1. Span dividers M N and from H locate point E. Draw line

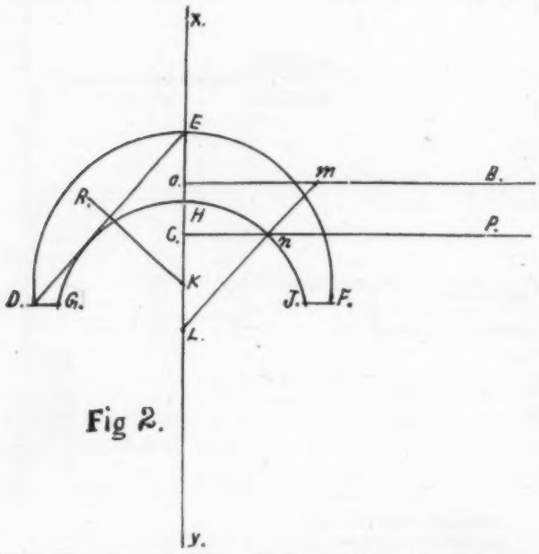


Fig 2.

D E, Fig. 2, and through its center at right-angles draw line R K until it intersects X Y at K. Now with K as center and K E radii strike arc D E T and you have it. This will give you strainer pail lip by spanning three times each way from point H.

"TINKUM."

Springfield, Wis., Oct. 21, 1901.

TAKES A PART IN THE GLOBE CONTROVERSY

TO THE AMERICAN ARTISAN.

I did not intend to take part in the globe controversy, but "Snippers," in his letter, Oct. 29, makes some statements which I do not agree with. The statement that it would take three days' labor to complete the globe, as it is a little overdrawn, $10 would be none too much if it required three days' time. The trouble with "Snippers" and some others is that we make too broad assertions and are not particular as to facts. I think $5.75 is a reasonable price on the globe, too low rather than too high. Now, I am no windmill tinner, nor do I possess much knowledge of any of the side-line trades. But I wish I did know more about them. Am sure if I possessed the knowledge some brother tinners claim to have, after naming a dozen trades, more or less, say "I am thoroughly posted in them all." Should think they could command $5.00 to $10.00 per day. Brother Snippers makes another assertion which I can not agree to. He says there is an army of 10,000 "genuine, tobacco-chewing, tin-shearing tinners." Of course, we will all stand by Brother Geel, but I object to the tobacco-chewing classification. There may be quite a number addicted to the weed, and I venture the assertion that they all would be glad to be free from the habit. I do not censure them, but rather pity. Would be sorry for the younger tinners to get the impression we are all the sort "Snippers" pictures us to be. We hear, ever now and then, some complaints coming from certain tinners, where they have to put in double time work Sundays, do all kind of menial work and the proprietor treats them with contempt. Part of this is pure imagination and the rest they deserve. If we respect ourselves, keep clean (which is next to Godliness), and as moral and upright in life, we are as good as any man that walks the earth, and others will acknowledge the fact, too. I have observed a good many tinners that act as though a person well dressed, respected in the community, was their superiors. This is a mistake. Let us be men among men. This is why I object to "Snippers" assertion. It leaves the wrong impression, though I think he made it unthoughtedly.

W. A. DRIGGS.

Norton, Kan., Nov. 8, 1901.

MR. GEEL'S CHARGE.

TO THE AMERICAN ARTISAN.

I noticed in your issue of Oct. 26 an article from Mr. J. A. Geel, of Highland, Ill., asking for information as to whether his bill was too high or low for a finial he made for the city. Mr. Geel did not state whether he had made the city council an estimate or an approximate of the cost of the finial before making it, or if he was ordered by council to make finial according to certain specifications and present his bill for same. If the latter is the case, I would say Mr. Geel let them down very easy. His services would have been more highly appreciated if he had charged more for his work, for his opponent in the council would have registered a kick any way. According to Mr. Geel's description of the work I should figure it as follows: I should allow a day and a half for making, or 13½ hours at 50 cents per hour, $6.75; 2 sheets of IX tin, 20x28 inches, 50 cents; 5 pounds galvanized iron, 10 cents per pound, 50 cents; 1 pound solder, 35 cents; total, $7.10. This does not include putting up, which would be 50 cents per hour extra.

G. L. GRAY.

Galesburg, Ill., Nov. 10, 1901.

HIS CHARGE WAS TOO LOW.

TO THE AMERICAN ARTISAN.

In answer to Mr. Geel's inquiry, would say I have made a few "Kreeney crooks" and "Funny Finickals," and think his charge was altogether too low. I think the cheapest and best way to make balls is to buy them.

R. J. SLOTHOWER.

Dixon, Ill., Nov. 9, 1901.

MR. GEEL'S PRICE WAS ALL RIGHT.

TO THE AMERICAN ARTISAN.

I have read what Mr. Geel had to say about his making a ball, and also about his charges. Now, Mr. Geel, I don't know what you made besides the ball alone, but you must have made a finial with it, and if you did, and went and put it up, your charges are all right. And one thing more, the party that did the kicking on your bill is sore on you, and you should consider the source, as the fellow said when the mule kicked him.

F. D. B.

Waupaca, Wis., Nov. 10, 1901.

TINNER SHOULD PLEASE CUSTOMER.

TO THE AMERICAN ARTISAN.

How to get better wages I think every tinner should do his work in first-class shape and try and do as his employer wants him to do, and when he goes out of the shop try and please the customer, and that customer will come again some time and ask that that certain tinner be sent to his house again. By the tinner pleasing the people the boss will think more of him, and his good work will make his services more valuable to the boss. And, tinners, when your boss finds that his customers are satisfied with your work, if he is any man at all, he will give you a raise in wages. I have been in front of the bench for 18 years, and have tried this plan, and found that nine times out of ten it would work, but just now I am about to open up shop for myself, and I shall continue to try and please the people.

F. D. BURGESS.

Waupaca, Wis., Nov. 10, 1901.

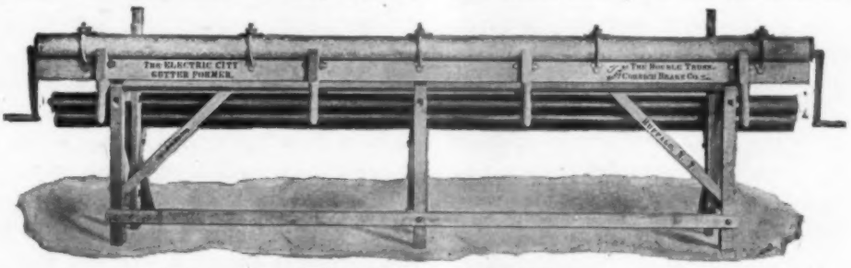
METAL MEN FEED.

On the evening of November 9 the clerical force of the St. Louis branch of the Berger Mfg. Co. enjoyed a dinner in the banquet hall of the Planters' Hotel, through the hospitality of S. Y. Buckman, manager of this branch. The affair was the occasion for several good speeches, among them those of Mr. Buckman, who touched upon the company's policy and business methods, and said: "There never was a time in the history of the manufacturing world when brains were in such demand as they are today," complimenting the personal application shown in the various departments of the company. His remarks were peculiarly appreciated, displaying as they did the thorough good-fellowship and understanding which exists among the company's employes.

THE ELECTRIC CITY GUTTER FORMER.

The Double Truss Cornice Brake Co., 1453 Niagara street, Buffalo, N. Y., for whom J. L. Perkins & Co., 241 Lake street, Chicago, are western agents, are placing a new gutter former on the market, shown in the accompanying cut. The Electric City gutter former embodies some radical innovations, both in construction and operation. There are no journals and cranks on the forming rolls. The rolls are rigidly secured to the bed piece of the machine at intervals along their entire length, and the material is bent around the rolls with a mechanical forcing bar, which is also secured to the bed piece at intervals along its entire length. The forcing bar applies a perfectly even pressure against the material being formed throughout its entire length, insuring a perfectly straight and evenly formed gutter, each piece being uniform in size and shape, requiring no reforming.

In this machine the sheet metal is entered into the beading rod groove in an upright or perpendicular position, the weight of the material enabling the sheet to be easily and quickly entered and retained in the groove. The beading rod automatically adjusts itself. The mechanical parts are constructed of iron or steel.



The Electric City Gutter Former.

The beading rods are made of the best steel, with a clean-cut groove, latest pattern key-seated cranks and polished steel hand grips. The forming rolls are made of built-up stock turned off perfectly straight and true. The ends are protected with iron caps and the sides are entirely covered with sheet steel. The capacity of this machine is from 600 to 1,000 feet of perfectly formed gutter per hour, and its cost is very low.

HOT SOLDER.

A Wisconsin man recently came to Chicago and bought the Masonic Temple for $12,000, $400 down. A Missouri man wanted to see where an automobile had run into the Chicago river, and a Nebraska man paid a Chicago siren $700 for a kiss. The adventures of these gentlemen are all given in "Hot Solder," a small pamphlet issued by J. L. Perkins & Co., 241 Lake St., Chicago. This booklet will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

ENAMELED WARE.

The Lalance & Grosjean Mfg. Co., 19-21 Cliff street, New York, and 81 Michigan avenue, Chicago, send us their latest price list of agate nickel-steel, pearl-agate, peerless, blue and white, all-white and Regal steel enameled wares.

In the Agate nickel-steel ware the enamel is so hard that the fusing point is not reached until the nickel-steel, of which the articles are formed, is about ready to melt, thereby combining with the pure vitreous composition and forming a clinch or perfect union. This ware is double coated with a hard vitreous covering, presenting a smooth, highly polished and beautifully mottled gray surface. Pearl agate ware is made of sheet steel coated on the inside with an absolutely pure white porcelain, and on the outside with enamel of bright mottled colors, presenting a tinted, wavy effect. The assortment of colors consists of violet, chocolate and sage.

Peerless enameled ware is made of sheet steel covered with mottled gray enamel.

Blue and white enameled ware is made of sheet steel coated on the inside with an absolutely pure white porcelain and on the outside with a bright blue enamel.

All-white enameled ware is made of sheet steel, coated on the inside and out with an absolutely pure white porcelain and ornamented with a bright blue border.

Regal steel ware is made of sheet steel, coated on the inside with an absolutely pure all white porcelain and on the inside with an enamel of bright blue and white or green and white colors.

This firm would be pleased to send free on application price lists of planished ware, hotel ware, pieced tin ware, japanned ware, plain and retinned stamped wares, milk cans, sinks, plumbers' goods and flint enameled ware. This price list shows the different colors of the different wares, and will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

RESTARTING TIN PLATE MILLS IN WALES.

A notable feature in the tin plate industry of South Wales recently has been the restarting of so many works, some of them after years of idleness. At the end of September there were 377 tin plate mills at work, as compared with 349 mills working at the end of August. Thus, there has been an increase of 28 mills in the course of one month. These 28 mills would have a producing capacity of about 15,500 boxes per week. As compared with a year ago, however, the increase has only been 18 mills, the figures being 377 and 359, respectively. There are at present 60 idle mills. In September the total exports of tin plates and black plates amounted to 29,745 tons, and in August they were 25,684 tons, or an increase for September of 4,061 tons.—Iron and Coal Trades' Review.

NOTES AND QUERIES.

ACETYLENE LAMPS.

From Aiken Bros., Colton, Wash.

Where can we buy acetylene swinging arc hand lamps for store use?

Ans.—The Badger Brass Mfg. Co., Kenosha, Wis.; Hine-Watt Mfg. Co., 14 N. Canal street, Chicago; Matthews & Willard Mfg. Co., Waterbury, Conn.

ANGLE IRON.

From Torry & Cline, Brook, Ind.

Where can we buy angle iron?

Ans.—Birmingham Rolling Mill Co., Birmingham, Ala.; Cambria Iron Co., Johnstown, Pa.; Carnegie Steel Co., Ltd., Pittsburg, Pa.; Cleveland Rolling Mill Co., Cleveland, O.; Diamond State Iron Co., 29 Broadway, New York; Globe Rolling Mill Iron & Steel Co., 165 W. Pearl street, Cincinnati, O.; H. Loyd's Sons Co., Pittsburg, Pa.; Pasaic Rolling Mill Co., Paterson, N. J.; Phoenix Bridge Co., 410 Walnut street, Philadelphia; Portage Iron Co., Ltd., Duncansville, Pa.; A. & P. Roberts Co., 261 S. Fourth street, Philadelphia; Tudor Iron Works, 415 Locust street, St. Louis, Mo.; Union Iron & Steel Co., Youngstown, O.

GASOLENE ENGINE WITH TWO CYLINDERS.

From J. S. Dewey, Oakdale, Neb.

Where can I buy a gasolene engine in which there are two cylinders with the power applied between them?

Ans.—The McMillan Motive Power & Construction Co., 169 E. Jackson Blvd., Chicago; White & Middleton Gasolene Engine Co., 315 Dearborn street, Chicago.

GASOLENE ENGINE WITH ONE CYLINDER.

From J. S. Dewey, Oakdale, Neb.

Where can I buy a gasolene engine with one cylinder, with power applied at each end of the cylinder?

Ans.—White & Middleton Gasolene Engine Co., 315 Dearborn street, Chicago.

IRON BEAMS.

From N. M. Nelson, Deerfield, Wis.

Where can I buy iron beams?

Ans.—Birmingham Rolling Mill Co., Birmingham, Ala.; Carnegie Steel Co., Pittsburg,; Champion Iron Co., Kenton, O.; J. B. & J. M. Cornell, 143 Center street, New York; Thomas Dimond, 128 W. 33d street, New York; Jackson Architectural Iron Works, 315 E. 28th street, New York; Passaic Rolling Mill Co., Paterson, N. J.; Paxton & Vierling Iron Works, Omaha, Neb.; Phoenix Bridge Works, 410 Walnut street, Philadelphia; Wm. B. Pollock & Co., Youngstown, Pa.; Pottsville Iron & Steel Co., Pottsville, Pa.; Trenton Iron Co., Trenton, N. J.; Variety Iron Co., York, Pa.

SAD IRONS.

From "Reader," Chicago.

Who are the leading sad iron manufacturers of the country?

Ans.—Detroit Register Co., Detroit, Mich.; A. C. Williams, Ravenna, O.; Ferrosteel Co., Cleveland; Enterprise Mfg. Co. of Pa., Philadelphia, Pa.; Schreiber & Conchar Mfg Co., Dubuque, Ia.; Bless & Drake, Newark, N. J.; Genesee Valley Mfg. Co., Mt. Morris, N. Y.; Jas. L. Haven Co., Cincinnati; Illinois Iron & Bolt Co., Carpentersville, Ill.; Michael Mahony, Troy, N. Y.; New England Butt Co., Providence, R. I.; Reading Hardware Co., Reading, Pa.; N. R. Streeter & Co., Rochester, N. Y.; Troy Laundry Machinery Co., Ltd., New York; Wrightsville Hardware Co., Wrightsville, Pa.; Samuel C. Tatum Co., Cincinnati, O.; Fanner Mfg. Co., Cleveland, O.; Dover Mfg. Co., Canal Dover, O.; Blacklock Foundry, South Pittsburg, Tenn.

BRICK MAKING MACHINES.

From W. C. Buderus, Sturgis, S. D.

Would like addresses of firms making brick machinery?

Ans.—American Clay Working Machine Co., Bucyrus, O.; Anderson Foundry & Machine Works, Anderson, Ind.; H. Brewer & Co., Tecumseh, Mich.; Drake Standard Machine Works, Chicago; Leader Mfg. Co., Decatur, Ill.; Michigan Brick & Tile Machine Co., Morenice, Mich.; Taplin, Rice & Co., Akron, O.; Tiffin Agricultural Works, Tiffin, O.; Wallace Mfg. Co., Frankfort, Ind.

ITEMS.

George Gilman succeeds J. D. Burley as a St. Johnsville, N. Y., tinner.

E. W. Edwards, of the Edwards Mfg. Co., Covington, Ky., has forsaken the ranks of the single blessed, The date on which Mr. Edwards' friends threw rice at him was Nov. 14, and the place was Canal, Dover, O.

Berger Bros. Co., of Philadelphia, Pa., report a very satisfactory increase in the demand for their roofing supplies, of which they manufacture a great variety. Chief among these are Berger's patented snow-shoe irons, which eliminate the necessity of snow rails, as the lugs clinch easily through the seams and are securely fastened. This firm manufactures, also, all kinds of valves and plungers, as well as extension ladders.

The Friedley & Voshardt Co., 194-200 Mather street, Chicago, are well known as manufacturers of an excellent line of art metal ceilings, architectural ornaments and statuary in copper bronze and zinc, and produce also an elegant line of spun work. This firm will cheerfully furnish estimates on all jobs of ornamental metal work. Send for their catalogue and price list. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

T. V. Allis, Bridgeport, Conn., one of the incorporators of the International Tin Plate Co., recently incorporated under the laws of New Jersey, advises us in a recent favor that his firm will manufacture the regular commercial tin plate in this country and in Europe under the numerous patents their company holds upon the Allis-Andrew system, which is being very successfully developed, and makes a very large saving in the cost of manufacture as compared with the methods now in use. The principal economy lies in rolling the black plate.

Some of the most pleasing articles of enameled ware for the dealer to handle are undoubtedly the "Solid Steel" lava enameled ware, manufactured by the well-known Cleveland Stamping & Tool Co., of Cleveland, Ohio. This firm manufacture a large variety of enameled ware pans, water kettles, tea kettles, skillets and spiders made of solid steel and covered with a superior enamel, which, by its lasting qualities, has made an enviable reputation for the wares of this enterprising firm. The trade should send 10 cents in stamps for free sample. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

Hardware dealers who wish to add a separate and well-paying line to their business can do no better than to investigate the proposition made by H. S. Northrop, 53 Cherry street, New York, the well-known manufacturer of Northrop's stamped steel ceilings. Send for a catalogue, give diagram and description of room for estimate, and this firm will do the rest for you. These ceilings are manufactured in squares of such a size as are easiest handled and put in place, and are modeled after the very latest and most pleasing patterns. When writing for catalogue kindly add: "Saw it in THE AMERICAN ARTISAN."

The Niagara Machine & Tool Works, of Buffalo, N. Y., manufacture not only a large variety, but, in fact, all kinds of machines and tools necessary to the business of tinsmithing, roofing and cornice making. Only the highest skilled labor is employed in the manufacture of their high-grade shears, presses, dies, punches and rolls, and all other mechanics' tools, and the fame of the products of this enterprising firm has deservedly spread from ocean to ocean. When next in need of any such tools the trade should write this firm for catalogue and price list. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The dealer will now turn his attention to the top covering of the dwellings in his vicinity, preparing roofs for the cold blasts and the snow and ice which are now approaching fast. The old adage "The best is the cheapest in the end" still holds true, and this is especially so in the case of roof covering. A roof which can be depended upon in all seasons, wet or dry, hot or cold, is the one covered with Cortright's metal roofing, manufactured by the Cortright Metal Roofing Co., 59 North 23d street, Philadelphia, Pa. This product has stood the test of time, and can safely be relied upon. This firm will cheerfully send catalogue and price list. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

William I. Russell, a New York metal broker is either the victim of a despicable trick or is the player of a despicable practical joke. On Nov. 12 a note was received by Louis Wheaton, president of the United States Chemical Co., at his home address, 107 West 128th street, New York, which was thought to bear Mr. Russell's signature. Its contents were such as to give the impression that the writer intended to commit suicide. The note was written on the letterhead of W. I. Russell & Co., and alarmed Mr. Wheaton greatly. Mr. Russell's son, W. B. Russell, of 206 West 78th street, and Mr. Wheaton went to the West 68th police station and turned the note over to the police. No explanation of the note has yet been given.

W. H. LaSuer is president, F. P. Grimes is vice president, George M. Harrison treasurer, M. O. Rowland is secretary, W. L. Miller is manager and F. R. Barrett is superintendent of the recently incorporated Challenge Churn Mfg. Co., Paw Paw, Mich., capitalized at $10,000.

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Malleable Iron Range Co..... 1
McClure & Co..... 56
Mersfelder, W. L..... 43
Meyer Furnace Co..... 11
Michigan Hardware Mfg. Co..... 52
Milwaukee Automatic Machine Co 43
Monroe Furnace & Foundry Co. 14
Montross Metal Shingle Co..... 52
Mueller, L. J. Furnace Co..... 12
National Enameling & Stamping Co..... 47
Niagara Machine & Tool Works.. 55
North Bros. Mfg. Co..... 44
Northrop, H. S..... 52
Obermayer, S. Mfg. Co..... 9
Old Dominion Iron & Nat. Works 51
Osborn, The J. M. & L. A. Co..... 56
Peck, Hubert..... 39
Pelouze Scale & Mfg. Co..... 51
Perkins, J. L. & Co..... 50
Peters Cartridge Co..... 46
Phila. Hdw. & Malleable Iron Wks 15
Phillips, The A. J. Co..... 50
Pittsburgh Stove and Range Co... 8
Plume & Atwood Mfg. Co..... 53
Portsmouth Stove & Range Co.... 8
Powers Bros..... 52
Randleman Sons..... 41
Resor, Wm. Co..... 7
Richmond Stove Co..... 9
Rochester Radiator Co..... 15
Rogers, S. L. & G. H..... 47
Schneider & Trenkamp Co..... 5
Schreiber & Conchar Mfg. Co..... 49
Schwab, R. & J. Co..... 12
Shinnick, Woodside & Gibbons Mfg. Co..... 9
Smith & Hemenway Co..... 45
Sperry, D. R..... 55
Standard Chain Co..... 49
Stanley Rule & Level Co..... 45
Stellwagen & Kynoch..... 9
Stevens Arms & Tool Co..... 56
Sykes Steel Roofing Co..... 53
Taylor, N. & G. Co..... 56
Tinnerman Steel Range Co..... 10
Tower Mfg. Co..... 51
Triumph Adjustable Stove Pipe Co 51
Union Stove Repair Co..... 42
Utica Heater Co..... 13
Utica Drop Forge and Tool Co.... 45
Van John Range Co..... 7
Weller Pattern Co..... 43
Welling Mfg. Co..... 41
White, Thomas..... 4
Willard, Wm. G..... 10
Willis Mfg. Co..... 52
Wynn, Lewis D..... 42
Yawman & Erbe Mfg. Co..... 45
Zucker, Levett & Loeb Co..... 50

CLASSIFIED LIST.

Architectural Sheet Metal Work.
Friedley & Voshardt..... 55

Awnings.
Canton Steel Roofing Co..... 54

Building Paper.
Bradner, Smith & Co..... 53

Card System.
Yawman & Erbe Mfg. Co..... 45

Ceilings-Steel.
Berger Mfg. Co..... 54
Burton, W. J. & Co..... 53
Canton Steel Roofing Co..... 54
Eller, J. H. & Co..... 52
Friedley & Voshardt..... 55
Garry Iron Roofing Co..... 53
Illinois Roofing & Supply Co..... 52
La Crosse Steel Roof & Cor. Co.. 53
Michigan Hardware Mfg. Co..... 52
Northrop, H. S..... 52

Cement.
Connors, Wm..... 1

Chains.
Standard Chain Co..... 49

Chimney Tops.
Berger Mfg. Co..... 54
Garry Iron & Steel Co..... 53
La Crosse Steel R.& C. Co..... 53
Powers Bros..... 52

Conductor Strainers.
Canton Steel Roofing Co..... 54
Garry Iron & Steel Co..... 53
La Crosse Steel Roofing & Cor.Co 53

Cornices.
Berger Mfg. Co..... 54
Burton, W. J. & Co..... 53
Canton Steel Roofing Co..... 54
Garry Iron & Steel Roofing Co.... 53
La Crosse Roofing Co..... 53

Cornice Ornaments and Statuary.
Willis Mfg. Co..... 52

Corrugated Arches.
Canton Steel Roofing Co..... 54

Drills.
North Bros. Mfg. Co..... 44

Eave Troughs.
Berger Mfg. Co..... 54
Berger Bros Co..... 53
Canton Steel Roofing Co..... 54
Clark, Quien & Morse..... 41
Cooney, Geiger & Co..... 52
Garry Iron & Steel Roofing Co.... 53
Illinois Roofing & Supply Co..... 52
La Crosse Steel Roof. & Cor. Co.. 53
Welling Mfg. Co..... 41

Elevators.
Kimball Bros..... 55

Enamel—Tinted.
Adams & Elting Co..... 44

Enamel Ware.
Nat. Enameling & Stamping Co.. 47

Faucets
Clark Novelty Co..... 2

Files.
Barnett, G. & H. Co..... 1

Flue Stoppers.
Welling Mfg. Co..... 41

Foundry Supplies.
Obermayer, S. Mfg. Co..... 9

Fuel Economizers
Burton, W. J. & Co..... 53

Furnace Cement.
Connors, Wm..... 1

Furnace Pipe.
Osborn, The J. M. & L. A. Co.... 56

Furnaces—Tinners.
Burgess Soldering Furnace Co.... 43
Clark Novelty Co..... 2
Clayton, Lambert & Co..... 48

Furnaces Warm Air.
Bergstrom Bros. & Co..... 12
Boynton Furnace Co..... 13
Brand Stove Co..... 10
Forest City Foundry Co..... 14
Kelsey Furnace Co..... 2
Meyer Furnace Co..... 11
Monroe Furnace & Foundry Co... 14
Mueller, L. J. Furnace Co..... 12
Schwab, R. J. & Co..... 12
Utica Heater Co..... 13

Hardware Specialties.
American Cutlery Co..... 55
Atkins, E. C & Co..... 50-56
Atlas Mfg. Co..... 1
Atlas Bolt & Screw Co..... 1
Blacklock Foundry Co..... 51
Bommer Bros..... 1
Caldwell Mfg. Co..... 50
Chicago House Wrecking Co..... 53
Galesburg Cornice Works..... 55
Iwan Bros..... 51
Lee Glass, Andreesen Co..... 46
Lufkin Rule Co..... 55
Nat. Enameling & Stamping Co... 47
North Bros. Mfg. Co..... 44
Plume & Atwood Mfg. Co..... 53
Schreiber & Conchar Co..... 49
Sperry, D. R..... 55
Tower Mfg. Co..... 51

Heaters—Hot Water and Steam
American Radiator Co..... 2-3
Hart & Crouse..... 11
Kewanee Boiler Co..... 2

Hinges—(Spring.)
Bommer Bros..... 1

Hog Scrapers
Smith & Hemenway..... 45

Horse-Shoes.
Old Dominion Iron & Nail Works 51

Hose Coupling.
Clayton, Lambert Mfg. Co..... 48

House-Furnishing Goods.
Blacklock Foundry..... 51
Cleveland Stamping & Tool Co... 41
Enterprise Mfg. Co..... 45
National Enameling & Stamping Co..... 47
Sperry, D. R. & Co..... 55

Knives.
Smith & Hemenway Co..... 45

Lawn Sprinklers
Smith & Hemenway..... 45

Lamps
Acorn Brass Works..... 44-48
Chicago Solar Light Co..... 48
Imperial Gas Lamp Co..... 48

Lights.
Acorn Brass Works..... 44-48
Chicago Solar Light Co..... 48
Imperial Gas Lamp Co..... 48

Mantels.
Ironton Wood Mantel Co..... 48

Metal Shingles.
Burton, W. J. & Co..... 53
Cortright Metal Roofing Co..... 55
Garry Iron & Steel Roofing Co.... 53
La Crosse Steel Roof & Cor Co... 53
Montross Metal Shingle Co..... 52

Metals-Perforated.
Aitchison, The Robt Perf'd Metal Co..... 53
Harrington & King Perforating Co 56

Metallic Shutters.
Berger Mfg. Co..... 54
Burton & W J. Co..... 53
Canton Steel Roofing Co..... 54
Garry Iron & Steel Roofing Co.... 53
La Crosse Steel Roof & Cor Co.. 53

Mica
Asheville Mica Co..... 43

Mitre Boxes.
Smith & Hemenway Co..... 45

Nails.
Old Dominion Iron & Nail Works 51

Nail Pullers
Smith & Hemenway Co..... 45

Paints.
Buckeye Paint & Varnish Co..... 42
Canton Steel Roofing Co..... 54
Dixon, Jos. Crucible Co..... 40
Garry Iron & Steel Co..... 53
La Crosse Steel Roofing & Cor.Co. 53

Paper.
Bradner-Smith & Co..... 53

Patents.
Jenner, H. W. T..... 39
Peck, Hubert..... 39

Plating
Zucker, Levett & Loeb..... 50

Plyers and Nippers.
Smith & Hemenway Co..... 45

Polish.
Buckeye Paint & Varnish Co..... 42
Hoffman, Geo. W..... 42

Radiators.
American Radiator Co..... 2-8
Castle-Wilmot Co.....15
Rochester Radiator Co..... 15

Razors.
Fox Cutlery Co..... 49
Smith & Hemenway Co..... 45
Utica Drop Forge & Tool Co 45

Registers.
Canton Steel Roofing Co..... 54
Henry & Scheible Co.....11
Independent Register Co.....14
Phila. Hdw. Malleable Iron Wks... 15

Riveters
Milwaukee Automatic Machine Co 51

Roofing.
Berger Mfg. Co..... 54
Canton Steel Roofing Co..... 54
Cortright Metal Roofing Co..... 55
East Bangor Consolidated Slate Co..... 53
Eller, J. H. & Co..... 52
Garry Iron & Steel Co..... 53
Klauer Mfg. Co..... 53
La Crosse Steel Roofing Co..... 53
Montross Metal Shingle Co..... 52
Osborn, The J. M. & L. A. Co.... 56
Perkins, J. L. & Co..... 50
Sykes Steel Roofing Co..... 53
Taylor, N. & G. Co..... 56

Sad Irons.
Blacklock Foundry..... 51
Dover Mfg. Co..... 49
Schreiber & Conchar Mfg. Co.... 49

Saws.
Atkins, E. C. & Co..... 50-56
Disston's Henry Sons..... 45

Saw Sets.
Smith & Hemenway Co..... 45

Scales.
American Cutlery Co..... 55
Pelouze Scale & Mfg. Co..... 51

Screw Drivers.
North Bros. Mfg. Co..... 44
Smith & Hemenway Co 45

Sheet Metal Ornaments.
Michigan Hardware Mfg. Co..... 52
Willis Mfg. Co..... 52

Siding.
Canton Steel Roofing Co..... 54

Sporting Goods.
Peters Cartridge Co..... 46
Stevens, J., Arms & Tool Co..... 56

Skylights.
Burton, W. J. & Co..... 53
Canton Steel Roofing Co..... 54
Friedley & Voshardt..... 55
Garry Iron & Steel Co..... 53
Jones, J. H..... 2
La Crosse Steel Roof & Cor. Co.. 53

Silverplated Ware.
Rogers, S. L. & G. H..... 47

Spring Hinges.
Bommer Bros..... 1

Stove Boards.
Michigan Hardware Mfg. Co.... 52

Stove Bolts.
Atlas Bolt & Screw Co..... 1

Stove Casters.
Independent Register Co.....14
Fanner Mfg Co..... 15

Stove Lining.
Connors, Wm..... 1
Bridgeport Crucible Co..... 43

Stove Patterns.
Acme Pattern Works..... 43
Cope, Geo. W. Pattern Works.... 43
Gobeille Pattern Works..... 43
Indianapolis Artistic Pattern Wks 43
Mersfelder, W. L..... 43
Weller Pattern Co 43

Stove Pipes.
Triumph Adjustable Stove Pipe Co 51

Stove Polish.
Ayling Bros..... 42
Dixon, Jos. Crucible Co..... 40
Wynn, Lewis D..... 42

Stove Repairs.
Brauer, A. G..... 43
Depinet Foundry Co..... 43
Dust, Wm. L. Stove Repairing Co 43
Union Stove Repair Co..... 42

Stoves and Ranges.
Beckwith, Estate of P. D..... 17
Champion Steel Range Co..... 10
Detroit Htg. & Ltg. Co..... 7
Detroit Stove Works..... 9
Economy Stove & Mfg. Co..... 10
Enterprise Stove Co..... 11
Fuller-Warren Co..... 6
Malleable Iron Range Co..... 1
Pittsburgh Stove & Range Co..... 8
Portsmouth Stove & Range Co.... 8
Resor, Wm. Co..... 7
Richmond Stove Co..... 9
Schneider & Trenkamp Co..... 5
Shinnick, Woodside & Gibbons Mfg. Co..... 9
Tinnerman Steel Range Co..... 10
White, Thos. Stove Co..... 4
Willard, Wm. G..... 10

Stove Trucks.
Stellwagen & Kynoch..... 9

Stove Trimmings.
Atlas Bolt & Screw Co..... 1
Columbus Bolt Wks..... 1
Fanner Mfg. Co..... 15

Tacks.
Tower Mfg. Co..... 51

Tape Measures.
Lukfin Rule Co..... 55

Tinners' Tools and Supplies.
Berger Bros. Co 53
Bertsch & Co..... 52
Chicago House Wrecking Co.... 53
Double Truss Cornice Brake Co... 50
Dreis, Andrews & Krump..... 50
Lufkin Rule Co..... 55
Niagara Machine & Tool Works.. 55
Perkins, J. L..... 50
Stanley Rule & Level Co..... 45

Tinplate.
American Tin Plate Co..... 54
Illinois Roofing & Supply..... 52
McClure & Co..... 56
Osborn, J. M. & L. A..... 56
Taylor, N. & G. Co..... 56

Tinware.
Cooney & Geiger..... 52
Enterprise Mfg. Co..... 45
National Enameling & Stamping Co..... 47

Ventilators.
Berger Bros. Co..... 53
Berger Mfg. Co..... 54
Burton, W. J. & Co..... 53
Garry Iron & Steel Roofing Co.... 53
Globe Ventilating Co..... 1
La Crosse Steel Roof. & Cor. Co.. 53
Powers Bros..... 52

Washer Cutters.
Smith & Hemenway Co..... 45

Washing Machines.
Benbow-Brammer Mfg Co..... 41
Brammer, H. F. Mfg. Co..... 41
Clark, Quien & Morse..... 41
Randleman & Sons..... 41

Window Screens.
Phillips, The A. J. Co..... 50

THE SCIENTIFIC AMERICAN CYCLOPEDIA OF RECEIPTS, NOTES AND QUERIES.

The Scientific American Cyclopedia of Receipts, Notes and Queries is a 734-page book, published by Munn & Co., 361 Broadway, New York. Those who are engaged in any branch of industry will find this book of the greatest practical value, and we specially commend it to those who are in search of an independent business, as they will find many formulae for the manufacture of salable articles which will be worth many times the cost of the book. As an example of the completeness of the book, we may state that under "alloys" will be found 723 formulas; blacking is represented by 175 receipts; bronzing and coloring metals, 350 receipts; cements, 630 receipts; cleansing, renovating and protecting, 620 formulas; cosmetic, 300 formulas; dyeing, 740 receipts, electro-metallurgy has 200 receipts; essences, 115 receipts; etching, 55 receipts; fireproofing, 50 receipts; gilding, 75 receipts; glues, 70 receipts; the hair, 150 receipts; inks, 480 formulas; lacquering, 130 formulas; liquors and cordials, 230 formulas; extracts and toilet articles, 750 formulas; microscopy, 200 formulas; paints and pigments, 300 formulas; paper, 250 receipts; photography, 500 formulas; pyrotechnics, 460 receipts; rubber stamp making; polishing, 250 receipts; soaps, 325 receipts; soldering, 140 formulas; staining, 177 formulas; syrups, 130 formulas; varnishes, 450 receipts, etc.

This volume tells how to make molasses beer, remove grease from emery wheels, clean crape, make coffee substitutes, correct proof, preserve milk, make imitation champagne, speckle cigars artificially, cement glass and porcelain, make tolu chewing gum, cement bicycle rims, etc. It is a rare compendium of specialized information.

UNSOLICITED TESTIMONIALS.

A Wheaton, Ill., lady who had "tried everything in vain until I commenced taking your valuable remedy," has written, if the Wheaton News can be believed, the following testimonial to a country druggist who is booming a new tonic:

DEAR SIR: Before taking your medicine I was too weak to spank the baby, but now I can lick my husband. Heaven bless you.

This reminds one of the Shakopee man who was nearly blind and took Dr. Sawyer's wonderful Elixir. He wrote:

DEAR SIR: Before taking your Elixir I could not see six inches before my face. Yesterday I saw wood. I feel that I ought to let these facts be known. Send me another bottle.

Phinneas E. Perkins, of Mound Center, S. D., says that before trying the Snake Cure "he had not drawn a sober breath for twenty-five years." Last Sunday he drew several sober breaths, greatly to the astonishment of his wife, and without injury to his health. He expects a perfect cure—some time.—Ex.

THEY WILL IF THEY CAN.

"The independent canning concerns are pretty certain to lead the fruit can trust a merry dance."

"The can-can, of course."—Ex.

Trade Report.

BRADSTREET'S ON IRON AND STEEL SITUATION.

The editor of Bradstreets telegraphs us this advance report on the iron and steel situation:

Demand for iron and steel is heavy and nearly all lines share in the strength. Pig iron is active at all markets and 25 cents per ton premium is freely paid for immediate delivery. Stocks are smaller than a month ago. Steel billets are also in demand and find ready sale at $28 per ton at Pittsburg. The rail situation is one of special strength; the leading interest being reported as having its output for the entire year 1902 booked. New rail orders at Pittsburg this week aggregate 100,000 tons, and mills in that district are sold up to next December. No advance in the price of rails is looked for, and railroads not already booked are not likely to receive their quotas much before late summer. The shortage of cars restricted furnace operations in the central west, and complaints of lack of motive power in addition are heard.

WIRE NAILS.

Wire nails are quoted at $2.40 in carload lots, while smaller lots are selling at $2.45.

CUT NAILS.

Small lots of cut nails are quoted at $2.35.

BARB WIRE.

Painted barb wire is quoted at $2.75 in carload, and $2.85 in smaller lots.

LEATHER BELTING.

Manufacturers of leather belting have made new prices as follows. Extra heavy, short lap, 50 and 10 to 60 per cent; regular short lap, 60 to 60 and 5 per cent; standard, 60 and 10 to 65 and 10 per cent; light standard, 65 to 70 per cent.

WHITE LEAD IN OIL.

In lots of 500 lbs. and over white lead in oil is 6½c per lb., and in lots of less than 500 lbs. it is 7c per lb.

LINSEED OIL.

City raw linseed oil is 60c per gallon in 5 barrel lots.

SPIRITS TURPENTINE.

Southerns are 38c to 38½c, and machine made barrels are 38½c to 39c per gallon.

IRON AND STEEL.

Dealers in old material report the market slowly improving with a decidedly active demand for some kinds of scrap. It is reported that dealers are trying to form an association to offset the association formed by consumers recently with the avowed purpose of keeping down prices. It is said that a meeting of dealers has already been held at Cincinnati, but it is the opinion in the trade that both associations will fail of their purpose and that the market will be regulated as formerly by the law of supply and demand. For old steel rails there is active demand for all sections, but there is little offering. Sale is reported of about 250 tons heavy section tees for rolling at $19.50 per gross ton, delivered at mill, and about 400 tons street rails, girder section at $18.00, same delivery. Demand for old iron rails, heavy section tees, is active. Sale is reported of 300 tons at $21.00, delivered at mill. Demand for both yard and railroad scrap is improving. Sale is reported of about 200 tons carefully selected yard at $17.50 gross ton; also 500 tons choice railroad scrap at $20.00, delivered at buyer's works.

BARS.

The Western B.r Iron Association, comprising all the manufacturers of bar iron west of Pittsburg, with the exception of two who declined to enter the pool, announce a cut in the price of $1 a ton, making the price equal to that of steel bars, 1.65c, Chicago. While the buying of steel bars has been as good as heretofore, transactions in bar iron have fallen off, which may be said to be due to the uncertainty in the minds of consumers that the present price will be maintained. We quote steel bars for immediate shipment, 1.65c to 1.70c, Chicago, and iron, 1.65c. Out of store, steel and iron, 2c; on contracts for large lots and extended deliveries, steel and iron, 1.65c.

SHEETS.

There is little change in the buying of this material to be noted in this city. The tonnage placed with mills has been heavy, though it is still impossible to get delivery on new business within three months. Transactions with jobbers have also been large, the delivery question turning much business to them. We quote No. 27 black, 3.75c to 3.90c, and galvanized 65 per cent and 10 per cent to 70 per cent from store.

STRUCTURAL STEEL.

There is no change from the situation reported last week. An enormous amount of building is being done in this city and contiguous territory, and a steady stream of orders of the smaller kind continues to come in. Owing to the fact that most of the mills are considerably behind in deliveries, there is a heavy demand from jobbers' stock, for which premiums are willingly paid. We quote mill shipments, carload lots, as follows: Beams, 15 inches and under, $1.75; 18 inches and over, $1.85; angles, $1.75 to $1.80; plates, $1.75, base; tees, $1.80; zees, $1.75; small lots from store, ¼c higher; beams and channels from store, ½c to ¾c per pound higher.

Quotations.

METALS.

FIRST QUALITY BRIGHT PLATES.

			Per Box.
IC	10x14		$8 75
IX	10x14		10 25
IC	12x12		9 00
IX	12x12		10 50
IC	14x20		8 75
IX	14x20		10 25
IXX	14x20		11 75
IXXX	14x20		13 25
IXXXX	14x20		14 75
IC	20x28		17 50
IX	20x28		20 50
IXX	20x28		23 50

COKE PLATES.

Cokes, 180 lbs	IC	20x28	12 70
Cokes, 200 lbs	IC	20x28	13 00
Cokes, 216 lbs	IC	20x28	13 30
Cokes, 216 lbs	IX	20x28	15 25

PIG IRON.

Lake Sup. Charcoal	$17 50@$18 00
Local Coke Fdy No. 1	15 50@ 16 00
Local Coke Fdy No. 2	15 00@ 15 50
Local Coke Fdy No. 3	14 50@ 15 00
Local Scotch Fdy No. 1	15 50@ 16 00
Local Scotch Fdy No. 2	15 00@ 15 50
Local Scotch Fdy No. 3	14 50@ 15 00
Southern Coke No. 1	15 15@ 15 40
Southern Coke No. 2	14 65@ 14 90
Southern Coke No. 3	14 15@ 14 40
Southern Coke No. 4	13 65@ 13 90
Southern No. 1 Soft	15 15@ 15 40
Southern No. 2 Soft	14 65@ 14 90
Southern Silveries	15 40@ 15 60
Jackson Co. Silveries	17 00@ 17 50
Ohio Strong Softeners	16 50@ 17 00
Alabama Car Wheel	20 50@ 21 00
Malleable Bessemer	15 50@ 16 00
Coke Bessemer	17 50@ 18 50

BLACK SHEET STEEL.

¼ in, 3-16 in. Nos. 8 and 10. per lb.	$3 80
No. 12 per lb.	3 85
No. 14 per lb.	3 90
No. 16 and 18 per lb.	3 95
No. 20, 22, 24, 25 and 26 per lb.	3 90
No. 27 per lb.	4 00
No. 28 per lb.	4 18

SMOOTH STEEL.

			per lb.
Wood's Smooth Steel, 15-17			$4 00
"	"	" 18	4 10
"	"	" 20	4 20
"	"	" 22-24	4 30
"	"	" 25-26	4 40
"	"	" 27	4 50
"	"	" 28	4 60

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON.

Galvanized Iron 70%

SOLDER.

Extra 18½c

Commercial 17½c

SHEET ZINC.

600 lb. Casks, base ..... 7c per lb.

COPPER.

Copper ..... base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb. ..... 28¼@28½c
Straits, pigs, per lb. ..... 28 @28¼c
Straits in bars, per lb. ..... 28¼@29 c

LEAD.

American Pig ..... 4.60@4.62½
..... 5½@c

HARDWARE.

QUOTATIONS.

(The quotations given below represent the current hardware prices. They are not given as manufacturer's prices, and manufacturers should not be held responsible for them. Manufacturers sometimes name higher figures than those quoted for goods; they are not always selling at the price quoted, but goods are being sold at the figures printed below by manufacturers and jobbers.)

ADZES—CARPENTERS'.

Hunt's	25%
White's	12½%
Coopers'—Barton's	12½%
White's	12½%
Ship—Barton's	12½%
White's	15%
Hunt's	25%

STEEL WARE.

Agate Nickel Steel Ware	50&20%
Pearl Agate Ware	50&20%
Blue and White Ware	60&15%
All White Ware (with blue border)	50&20%
Regal Steel Ware	60&10%

AMMUNITION

CAPS, PERCUSSION—per 1000—

F L Waterproof, 1-10s	50c
G D	40c
Eley's	52c

CARTRIDGES.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol & Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&5%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.	
Peters Blank Ctgs. 22 cal	10&10%
Peters Blank Ctgs. 32 cal	10&10%
Peters B B Caps, Round ball	$1 15
Peters B B Caps, Conical ball	$1 90
U. M. C. Rim Fire Ctgs	50&3%
U.M.C. Cent. Fire, Pistol & Rifle	25&3%
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. Blank Ctgs. 22 & 32 cal	10%
U. M. C. Blank Ctgs. 38 cal	50-10-10%
U. M. C. B B Caps, Round Ball	$1 75..25&10%
U .MC. B B Caps, Con. Ball	$2 00 net
U M. C. Rim Fire Shot Ctgs	50&15&3%
U. M. C. Cent. " " "	25&10&3%

PRIMERS.

Berdan Primers	$1 00
Peters Primers	1 10
U. M. C. Primers	1 08
Winchester Primers	1 08

SHELLS.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&5%
Peters Empty Paper Shells, 16 gauge. League	20&5%
Peters New Victor Nitro shells	15%
Ideal	33⅓&10%
Peters Loaded Shells. League and Semi Smokeless	40&5%
Peters New Victor Loaded Shells, with King's Smokeless	40&10&10%
Ideals Loaded with Kings Smokeless	40&10&10&5%
U. M. C, New Club, 16 guage	20&10%
U. M. C. New Club 10 & 12 gauge	33⅓&5%
U. M. C. New Club	33⅓&5%
U. M. C. Nitro	18%
U. M. C. High Base	18%
U. M. C. Trap	33⅓&10&7%
Winchester Blue Rivals / Winchester Yellow Rivals	20%
Winchester Repeater	18%
Winchester Leader	33⅓&10&7%
U. M. C. Loaded Shells. Black Powder / Winchester Loaded Shells, Black Powder	40&5%
U. M. C. / Winchester — Smokeless	40&10&10&5%

GUN WADS—per 1000.

Peters Gun Wads	20&5%
U. M. C. Gun Wads	20&5%

POWDER.

King's Quickshot Powder; Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.	
King's Semi-Smokeless	20&5%
King's Smokeless	25, 20 & 10
Austin Quickshot Powder, Kegs $4 00; ½ kegs $2 25; ¼ kegs $1 25.	
Dupont Smokeless, Sporting	25, 20 & 10c.

SHOT.

Drop shot, sizes smaller than B, 25-lb bags, per bag	$1 65
Drop shot, B and larger sizes, 25-lb bags, per bag	1 85
Buck Shot, 25-lb bags, per bag	1 85
Chilled Shot, 25-lb bags, per bag	1 85

ANVILS.

Hay-Budden, 70 to 84 lbs	10c per lb
Hay-Budden, 85 to 150 lbs	9c per lb

AUGERS AND BITS.

Snell's Boring Mach. Augers	60&10&5%
Snell's Car Bits, 12-inch twist	40%
Jennings' Pattern Auger Bits	50&10%
Russell Jennings' Augers and Bits	25&10%
Ship Augers, L'Hommedieu Bits	15%
Irwin	50%
Climax Bits	60&10%

AWLS.

Brad, handled per doz.	$ 35
Brad, shouldered, assorted 1 to 4 per gr.	2 00
Brad, shouldered, assorted 1 to 6 per gr.	2 50
Peg, Pat. per gr.	60
Peg, shouldered per gr.	1 00
No. 1, Scratch, handled per gr.	4 80
No. 5, Scratch, socket per doz.	6 00

AXES.

Lippincott	per doz	6 50
Mann	"	6 50
Second quality	"	6 00
Beveled axes, add	"	50
Broad—		
Peerless can patt	"	28 50
Hunt's	"	30
White's	"	12%
Hand—		
Hunt's	"	40
White's	"	12%
Ship—		
White's	"	12%

AXLES.

Common iron, long arm, sq. bed	5¼
Concord iron, long arm, sq. bed	6¼
Concord express, long arm, steel, square bed	6¾
Coach shape on above, ex. per. lb.	⅛
Short arms on above, extra per lb.	2
Welded axles on above, ex. per. lb	1½
Half Patent, steel, Nos. 7 to 14	70
Half Patent, steel, Nos. 19 to 22	70
Extra, coach shape, 1¼ & smaller per set	15
Extra, coach shape, 1¼ 1½, per. set	30
Extra, coach shape, l'g'r, per. set	$1 00
National Wrought Steel Tubular, Self-Oiliug—	
Standard Farm (1 to 5) and Special Farm (A1 to A5) less than ten sets	20%
Over ten sets	25

BEAMS—SCALE.

Scale Beams, List Jan. 12, 82	35%
Frary's	40%
P. S. & W.	30%

BELLOWS.

Blacksmiths	70%
Hand, 6½ in. per doz.	$4 50
Molders', 10 in. per doz.	9 00

BELLS.

COW.

Ordinary Goods	70&10%
High Grade	60&10%
Jersey	75&10%
Texas Star	50&10%

DOOR.

Abbe's Gong	45%
Barton Gong	55%
Home, R. & E. Mfg. Co.'s	55&10%
Lever and Pull, Sargent's	20&10&10%

HAND.

Hand Bells, Polished	60@60&10%
White Metal	55@55&10%
Nickel Plated	50@50&10%
Swiss	60%
Silver Chime	33⅓@33⅓&10%

MISCELLANEOUS.

Farm Bells	lb. 2¼ to 2½c
Steel Alloy, Church and School	50&10&5@60%
Wilmot & Hobbs Mfg. Co., Gongs	70%

DRILLS—BIT STOCK.

Standard List ..... 65&10&10@7)

DRILLS—TWIST.

Standard List ..... 60&10@65%
Straightened taper shanks to 1½ in.

BLOCKS.

Common Wooden	70%
Eddy Steel Tackle Blocks	66 2-3&5%

BOLTS.

CARRIAGE, MACHINE, ETC.

Common, list Jan. 30, 95	65%
Norway Iron, $3.00, list Oct. 7, '84	75&10%
Bolt Ends, list Jan. 30, '95	50&10%
Machine, list Sept. 20, '99	65&10%

DOOR AND SHUTTER.

Ives' Patent Door	60%
Wrought Barrel, Standard list.	70&10%
Wrought Flush	40&10%
Wrought Square, Standard list	65%

STOVE AND PLOW.

Plow	40&10%
Stove, list December 28, 1899	70&10&10%

TIRE

Common, list Dec. 28, '99	70%
Eagle Philadelphia	72½%
Norway	75%

BORING MACHINES.

Jenning upright without Augers..$2 00

BOXWOOD RULES.

No. 4	$11 00	per doz
" 12	16 00	" "
" 18	6 00	" "
" 26	11 00	" "
" 27	13 00	" "
" 29	4 50	" "
" 66	10 00	" "
" 66½	10 00	" "
" 67	6 00	" "
Boxwood		80&10%
Ivory		40&10%
Lufkin's Steel		50&10%

BRACES.

Barber's	50&10%
Common Ball, American	$1 50
Fray's Genuine Spofford's	60%
Fray's No. 307 to 322	40&5%
Fray's No. 508 to 522	50%

BRACKETS.

Cast Iron Plain.	50&10%
Wrought Steel	70&10@ 75%
Bradley's	75 @ 75&10%

BROILERS.

Wire Goods Co. 75%

BUTTS.

Bright Butts, Nos. 800, 802, 804, 806, 808, 810, 814, 816, 818, 820, 854	70%
Bright Butts, Nos. 826, 828, 829, 830, 832, 834, 836, 838, 840, 842, 843, 844, 845, 846, 848	70%
Bright Butts, Nos. 822, 822½, 823, 823½	70%
Japanned Butts, Nos. 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 726, 727, 728, 729, 730, 731	70%

CAGES—BIRD.

Enameled	40%
Brass 1200 series	33⅓%

CASTERS.

Bed	60&10&
Plate Casters	60&10&
Martin's Patent (Phoenix)	50&

CHAIN.

American Coil Chain, Less than Cask lots:

3-16	¼	5-16	⅜	7-16	½	9-16
8.40	6 30	5.25	4.85	4.20	4.10	4.05

⅝	¾	⅞ to 1
4.05	4.00	4.00c. per lb.

Less than Cask lots add 25c.

German Coil, list July 24, '97	60&10&10%
German Halter Chain, list July 24, '97	60&10&10%

Traces, Western Standard: 100 pair

6½—6-3, Straight, with ring	$29.00
6½—6-2, Straight, with ring	30.00
6½—8-2. Straight, with ring	34.00
6½—10-2, Straight, with ring	37.50

Add 2c per pair for Hooks.
Twist Traces 2c. per pair higher than Straight Link.

Trace, Wagon and Fancy Chains Eastern list	50&10%
Jack Chain, lis July 10 '96	
Iron	60@40&10
Brass	60@40&10

Safety Chain.....70&5@70&10%
Gal, Pump Chain.....lb. 4¼@4½c
Covert Sad. Works:
Breast, Hitching and Rein Chains.....70%
Covert Mfg, Co.:
Breast.....35&2%
Halter.....35&2%
Heel.....35&2%
Rein.....35&2%
Stallion.....35&2%
Oneida Community:
Eureka Coil & Halter40&10% new list
Niagara Coil and Halters.40@10% "
Niagara Cow Ties..45&5@45&10&5%
Am, Coil and Halters..50&10&5@60%
Am. Cow Ties.....35&5@40&5%
Wire Goods Co.:
Dog Chain.....60&10%
Universal Dbl-jointed Chain....50%

CHALK.

Blue.....per gross 60c
Red..... " 50c
White..... " 45c

CHALK LINES.

Chalk lines.....per doz. $2 50

CHISELS.

Mix..... } 70&5 to 70&10%
Witherby..... }

CHISELS.

Box.....20%
Tinners.....40%
Cold, per lb., regular qual.....20%
Cold, per lb., special qual.....32%
Corner.....662 2-3%
Firmer, American..... 20, 10&10%
Barton's.....20%
Butcher's.....40&10%
Mortice, Butcher's.....40&10%
Socket, Firmer.....70%
Framing.....70%
Turning, Barton's.....20%
Butcher's.....50%
Beveled.....20%

CLAMPS.

No. 25 Adjustable.....50&10 to 60%
Carriage Makers.....50&10&5%

CLEANERS.

Pot.....per doz $1.10

CLEAVERS.

Beatty's.....dis 40
White's.....dis 15

CLIPPERS.

E. H. Hotchkiss Horse Clippers
No. 10.....per doz $18 00
No. 30..... " 15 60
No. 22..... " 13 80
No 20..... " 13 20
No. 8..... " 10 80
H. Hotchkiss Toilet Clippers
No. 1.....per doz 9 60
No. 101..... " 10 80
No. 201..... " 10 80
No. 300..... " 13 20
No. 500..... " 15 00

COFFEE MILLS.

Enter. Mfg. Co., list Jan. 17, '93....25%
Parker's.....50&10%
Arcade.....60&10%

CORKSCREWS.

Howes.....25&22%
Humason & Beckley.....40&10%
Empire..... 40%
Walker's..... net
Williamson's Regular..... 40%
Williamson's Forged Worm... 40%

DOG COLLARS.

Pope & Stevens' List:
Brass (full Assortment).....net price

DOOR CHECKS.

Blount.....30%
Eclipse.....30%
Corbin.....30%

DRILLS AND DRILL STOCK.

Common Blacksmith's Drill ..... $1 50@$1 60
Bench Drills, Stearns'.....5 50& 6 00
Blacksmith's Self-feeding, each, ...$5 00&$7 00
Breast, Millers Falls, each .$3 00 20%
Godell Automatic Drills, $12 00to$15 00

EGG BEATERS.

Standard Co.:
No. 5 Steel Handle Dover per gross.....$ 6 50
No. 10 Cast Handle Dover pr gr 8 00
No. 10 Steel H'ndle Dov'r pr gr 8 00
No. 15 Extra Heavy Steel Handle per gr..... 15 00
Rival per gr..... 10 00
Taplin Mfg Co.:
No. 50 Small Family size pr gr 6 50
No. 100 Regular Fam size pr gr 8 00
No. 102 Regular Family size tinned pr gr..... 9 50
No. 150 Large Fam size pr gr.. 15 00
No. 152 Large Family size tinned pr gr..... 17 00
Lyon's Standard size per doz.. 1 75
Wonder (S. S. & Co.) per gr.... 7 50

ENAMELED WARE.

Peerless (L. & G. Mfg. Co.)...70&10%
Royal (N. E. & S. Co.).....Net

FASTENERS, BLIND.

Zimmerman's.....50&10%

FAUCETS.

Standard Metal Key.....25%
B. & L. B. Co.
Redlich's Wood Faucets.
Red Cedar..... } Net Prices.
Oak..... }
Cherry..... }
Cork Lined..... }
Metal Key..... }
Self Measuring:
Enterprise, per doz. $36 00.....40%
Cork Lined.....70&5@70&10&5%
Metallic Key, Leather Lined .....70@70&10%
Red Cedar.....50@50&5%
B. & L. B. Co.:
West's Lock, Open and Shut Key.....50&10%
John Sommer's Peerless Tin Key..40%
" " Boss Tin Key.....50%
" " Victor Metal Key..50&10%
" " Duplex Metal Key....60%
" " Diamond Lock.....40%
" " I X L Cork Lined....50%
" " Reliable " " ..50&10%
" " Common " " 70%
" " Chicago " " 60%
" " O K " " 50%
" " Perfection Cedar.....40%
Star.....60@60&5%
Star, Metal Plug new list... 40@40&5%
Lockport, Metal Plug, reduced list.....60&5%
McKenna, Brass:
Burglar Proof, N. P.....35%
Improved, ¾ and ⅞ inch.....35%
Self Measuring:
Enterprise, per doz $36.00.....40%
Lane's, per doz. $36.00.....40&10%
National Measuring, per doz $36.00.....40%

FILES—Domestic.

New List, Nov. 1, '99:
Black Diamond.....70&10%
Disston's.....75& 5%

Imported.

Stubs list.....5

FORKS AND HOES.

Coke and Cottonseed Forks....40&5%
Coal Forks.....40&5%
Barn or Ice Forks.....40&5%
Beet Forks.....30&10
Ballast or Stone Forks.....40&5%
Tanners' Forks.....40&5%
Shaving Forks.....40&5%
Potato Scoop Forks.....40%
Oyster Forks.....40&5%
Sluice Forks.....40&5%
Heavy Mill, Manure or Street Forks.....70%
Steel Tar or Asphalt Rakes.....65%
Asphalt Hoes.....65%
Two Tine Hay Forks, Std. Size..65%
3 Tine Hay Forks, Std. Size....65&10%
Four Tine Hay Fork, Std. Size 66⅔%
Socket Four Tine Hay Forks..66⅔&5%
Socket Four Tine Manure Forks...70%
Socket Four Tine Spading Forks .....70&5&5&2½%
Three Tine Hay Header and Baler Forks.....67½&2½%
Four Tine Hay Header and Baler Forks.....66⅔%
Grain or Barley Forks.....70&10%
Four Tine Manure Forks.....70%
Five & Six Tine Manure Forks.....70%
Spading Forks.....70&10%
Potato Digging Forks.....65%
Stone Picking Forks.....65%
Garden Hoes.....75&5%
Meadow and K. I. Hoes...75&5&2½%
Sunbeam Meadow Hoes.....75&5&½%
Mortar and Street Hoes.....75&10%
Planter Hoes, Regular Pattern.70&30%
Tobacco Hoes.....75&20%
Cotton Hoes.....70&10&10&5&2%
Rough Fin. Shank Cot. Hoes 75&12½%
Cotton Chopper Hoes....75&10&7½%
Ladies' Cotton Hoes.....75&10&7½%
Malleable Rakes.....70@70&10%
Toy Ladies' and Boys' Hoes.....70&10to70&10&5%
Weeding Hoesand Rakes...70@70&5%
Potato Hooks.....76&6%
Hop Hooks.....60&10&2¼%
Steel Garden Rakes.....70&10%
Steel Garden Rakes Stamped blank 70%
Turf Edgers.....60&5%
Steel Road Rakes.....65%
Special Mortar Hoes.....40&10&2½%
Harpers' No. 7 Mortar Hoes.....65%
Truck Hoes.....50&10&2%
Hoes.....65%
Special Hoes.....75&10&2%
Hoe Down Hooks.....75&10&2%
Warren Hoes.....60%
Laid Steel Edge Hoes.....25, 5&2%

GAUGES.

Marking, Mortise, etc.....60%
Stanley R. & L. Co.'s Butt & Rabbet Gauge.....Net
S. & H. Cos.....75%

GIMLETS.

Gimlets.....60%

GLASS CUTTERS

Woodward.....33⅓&10%
Red Devil.....33⅓&10%
Bonney & Co.....40&10%

GLUE POTS.

Tinned.....30%
Enameled.....35%

GLUE.

Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List
Martin's Liquid, List....33⅓% off List

GREASE, AXLE.

Fraser's.....Ne
Baum's Castorine.....Net

GRINDSTONE FIXTURES.

Stowell's.....Net
Reading Hardware Co.....Net

HAMMERS.

"Artisan's Choice." A. E. Nail.40&10%
Engineer's and B. S. Hand.....60%
Machinist's Hammers..50&10&5%to60%
Bell Face, A. E. Nail.....50
S. & H. Cos. No. 20 ....per gross. 5 25

HANDLES—IRON, WROUGHT OR CAST—DOOR OR THUMB.

No. 0.....per doz $0 90 } Dis
No. 1..... " 1 00 } 25
No. 2..... " 1 18 }
No. 3..... " 1 35 }
No. 4..... " 1 50 }
Bronze iron drop lat., per doz net $1 10
Japanned store door.....net 1 10
Barn door No. 5..... " 1 35
Chest and lift.....dis 50
Wood—
Saw and plane..... " 45
Hammer, hatchet, axe, etc.... " 45
Brad awl.....per gro. 45
Hickory firmer chisel..... } ..25
Apple firmer chisel..... }
Socket firmer chisel..... }
Socket framing chisel..... }
File.....per gro. $2 80
Auger, assorted..... 5 00
Hoe, rake, shovel, etc..... 50
Cross Cut Saw—
Atkins' No. 1.....per pair 28
" No. 3..... " 18
" No. 6..... " 12
Triumph..... " 12
Common loop..... " 10

HANGERS.

Chicago Spring Butt Co.:
Friction.....25%
Oscillating.....25%
Big Twin.....25%
Cronk Hanger Co.:
Loose Axle.....60%
Roller Bearing.....60&10%
Lane Bros.:
Parlor, Ball Bearing.....$4.00
Parlor, Standard..... 3.25
Parlor, New Model..... 2.75
Parlor, New Champion..... 2.40
Barn Door, Standard.....60&10%
Covered.....50&10&10&5%
Special.....60&10%
Lawrence Bros.:
Advance.....60%
Cleveland.....60&10%
Crown.....60%
New York.....60%
Peerless.....60&10%
Sterling.....60%
McKinney Mfg. Co.:
No. 2, Standard, $18.....60&10%
No. 1, Special, $13.....60&10%
Stowell Mfg. and Foundry Co.:
Acme Parlor Ball Bearing.....40%
Atlas.....50&10%
Badger Barn Door.....50%
Baggage Car Door.....50%
Climax Anti-Friction.....50%
Elevator.....40%
Express.....50%
Interstate.....50&10%
Lundy Parlor Door.....50%
Matchless.....50&10%
Nansen.....60&10%
Stowell Parlor Door.....50%
Railroad.....50%
Street Car Door.....50%
Steel, Nos. 300, 404, 500.....40&15%
Wild West.....50%
Zenith for Wood Track.....50%
Taylor & Boggis Foundry Co.:
Kidder's.....50@50&10%
Wilcox Mfg. Co.:
Bike Roller Bearing.....60&10%
C. J. Roller Bearing.....60&10%
Cycle Ball Bearing.....50%
Dwarf Ball Bearing.....40%
Ives, Wood Track.....60&10%
L. T Roller Bearing.....60&10&5%
New Era Roller Bearing.....50&10%
O. K. Roller Bearing.....60&10&5%
Prindle, Wood Track.....60%
Richards' Wood Track.....60%
Richards' Steel Track.....50&10%
Spencer Roller Bearing.....60&10%
Tandems, Nos. 1 and 2.....60%
Underwriters' Roller Bearing....40%
Wilcox Auditorium Ball Bearing 20%
Wilcox Barn Trolley No. 123....40%
Wilcox Fire Trolley, Roller Bearing.....30%
Wilcox Le Roy Noiseless Ball Bearing.....40%
Wilcox New Century....50&10&10%
Wilcox Trolley Ball Bearing.....40%

HATCHETS.

American Axe and Tool Co..... }
Blood's..... }
Hunt's..... }
Hurd's..... } 40&10%to40&10 &5%
Mann's..... }
Underhill's..... }
C. Hammond & Son.. }
Fayette R. Plumb.... }

HAY AND STRAW KNIVES.

Lightning.....$6 50&$7 00

HINGES.

BLIND AND SHUTTER.

Surface Gravity Locking Blind:
(Victor; National; 1868 O.P.; Niagara; Clark's O. P.; Clark's Tip; Buffalo.)
No.....1 3 5
Doz pair.....$0.75 1.45 2.90
Mortise Shutter:
(L. & P., O. S., Dixie, &c.)
No.....1 1½ 2 2½
Doz. pair.....$0.60 55 52 45
Mortise Reversible Shutter, (Buffalo, &c.)
No.....1 1½ 2
Doz. pair.....$0.65 .60 .55
Parker.....70@75%
North's Automatic Blind Fixtures, No 2, for Wood $9.00; No. 3, for Brick $11.50.....10%
Reading's Gravity.....75&10%
Sargent's, No. 1, 3, 5.....60⅔&10%
Sargent's. Nos. 11 & 13.....70&10%
Wrightsvile H'dware Co.:
O. S., Lull & Porter.....80&2½%
Acme, Lull & Porter.....75&10%
Queen City Reversible.....75&10%
Stenger's Positive Loeking, Nos 1 & 3.....70&10&5%
Shepard's Noiseless, Nos. 60, 65, 55 .....75&10%
Niagara, Gravity Locking, Nos. 1, 3 & 5.....75&7½%
1868, Old Pat'n. Nos. 1, 3 & 5 75&7½%
Tip Pat'n, Nos. 1, 3 & 5.....75&7½%
Buff, Gravity Lock., 1, 3, 5..75&7½%
Shepard's Double Locking, Nos. 20 & 25.....70&10%
Champion Gravity Locking, No 75 .....75&7½%
Steamboat Gravity Locking, No 10 .....5&7½%
Pioneer, Nos 060, 45 & 5½..75&7½%
Empire, Nos 101 & 103.....70&7½%
W. H. Co's Mortise Gravity Locking No. 2.....60&10%
Stanley's Steel Gravity Blind Hinges, per doz. sets $1.30.....20&10%

GATE.

Clark's or Shepard's—Doz. sets:
No.....1 2
Hinges with Latches $1.90 2.50

Hinges only..... 1.30 1.90 2.90
Latches only..... 65 65 95
New England:
With Latch.....doz....@$1.55
Without Latch.....doz....@$1.25
Reversible Self-Closing:
With Latch.....doz....@$1.80
Without Latch.....doz ...@$1.45
Western:
With Latch.....doz. $1.40@1.75
Without Latch.....doz. $0.95@1.30
Wrightsville H'dware Co.:
Shepard's or Clark's Nos. 1 & 2... 65&2½%
Shepard's or Clark's, No. 3....55&5%

SPRING

Holdback, Cast Iron, gros. $8.00@8.25
Non-Holdback, Cast Iron.... ... gro. $6.75@7.25
Extra 10% often given on most of these hinges.
J. Bardsley:
Bardsley's Patent Checking.....15%
Bommer Bros.:
Bommer Spring Hinges 40%
Bommer Ball Bear. Floor Hinges.40%
Chicago Spring Butt Co.:
Chicago.....20%
Floor Hinge.....40%
Garden City Engine House.....20%
Keene's Saloon Door 20%
Triple End.....40c
Hoffman Hinge & Foundry Co.:
No. 70 & 80 Holdback Detachable $8.50
Lawson Mfg. Co.:
Matchless.....30%
Matchles Pivot.....35%
Payson Mfg. Co.:
Oblique.....50&10%
Stover Mfg. Co.:
Ideal, No. 16, Detachable, per gr. $12.50
Ideal, No. 4.....per gr. $9.00
New Idea No 1.....per gr. $9.00
New Idea, Double Acting.....45%

WROUGHT IRON

Strapand T Hinges, list Mar. 15, 1901:
Light Strap Hinges.....75%
Heavy Strap Hinges.....80%
Light T Hinges.....70%
Heavy T Hinges.....66⅔%
Extra Heavy Hinges.....75&10%
Hinge Hasps.....60%
Cor, Heavy Strap.....80%
Cor. Ex. Heavy T.....75&10%
Screw Hook and Strap:
6 to 12 in.....lb. 3½c
14 to 20 in.....lb. 3¾c
22 to 36 in.....lb. 3 c
Screw Hook and Eye:
¾ to 1 inch.....lb. 5c
⅜-inch.....lb. 6c
½-inch.....lb. 7c

MISCELLANEOUS—

Hoffman's Steel Spring Butt Hinges 40&10%
Hoffman's Offset Refrigerator Hinges 40&10%

HOLLOWWARE.

Stove Hollowware Ground.....50%
Maslin Kettles.....70&10%

HOOKS.

Picture, No. 299 .....&28c

BUSH HOOK.

No. 1, Underhill $9 00
Bird cage 40%
Clothes line .....60&10&10%
Grapling.....50%
Ceiling.....60&5%
Coat and Hat .....60&5%
Harness .....60&10&10%

WROUGHT IRON.

Cotton, V. & B.....25%
Tassel and picture.....50%
Wire, Coat and Hat, Gem.....net
Indestructible 45%
Brass .....net $2 00%
Hooks and eyes, bright wire....80&10%
Brass.....60&10&5
Fish hooks, American.....50%

HOSE—RUBBER.

Competition.....dis 70&10%
Standard 70%
Extra 60%
N. Y. Rubber Co.'s st'd.....50&10%
Banner.....60%
Extra.....50%

IRONS—SAD AND POLISHING.

Mrs. Potts' No. 50.....70c
Mrs. Potts' No. 55.....70c
Mrs. Potts' No. 60.....90c
Mrs. Potts' No. 65.....95c

KNIVES.

Standard List.....70&5%
Adjustable Handle.....25@33⅓%
Watrous.....30&10@40%
Cantelo's Folding.....25%
Improved Crown.....20%

KNOBS.

Base, 2½in. Birch Rubber tip ℔ gro.....$1 40
Door, Mineral.....℔ doz. 65c
Door, Por. Jap'd.....℔ doz. 75c

LADLES.

Reading.....Net
Sargent's.....Net

LANTERNS—TUBULAR.

No. 0 Berger's "Bail Lift," per doz. $9 50.....40&10%
No. 0, Berger's "Bail Lift," Galvanized, per doz. $10 50...40&10%
No. 2 Berger's "Bail Lift," per doz. $13 00.....40&10%
No. 2 Berger's "Cold Blast," per doz. $16 00.....40&10%
No. 0 Berger's Dash Board, Japanned, Plain Globe, per doz. $13 00.....40&10%
No. 0, Berger's Dash Board, Japanned, Bull's Eye, per doz. $13 50.....40&10%
No. 2, Berger's Dash Board, Japanned, Plain Globe, per doz. $17 00.....40&10%
No. 2, Berger's Dash Board, Japanned, Bull's Eye, per doz. $17 50.....40&10%

BULL'S EYE POLICE.

2¾-in. flash light, per doz. $3 50@$3 75
3-in. flash light, per doz. ..4 00@ 4 25
4¾-in. regular, per doz.....3 50
3-in. regular, per doz.....3 57

LEMON SQUEEZERS.

Wood, Common, per gr., No. 0 $5 00; No. 1 $6 50; No. 2 $10 00.

Wood, Porcelain lined, No. 1.....per doz. $3 00@$3 50
Tinned Iron.....per doz. 1 25
Iron, Porcelain Lined, per doz.....3 25@ 3 50
Jenning's Star...per doz. 1 85@ 1 90
King.....per doz.

LOCKS.

Plate 33⅓%
Slaymaker-Barry Co.....30&25%
Sargent & Co.....40, 40&10%
Yale flat key.....net
L. & C, round key.....30&10%
Reading Harding Co.....40%
L. & C. flat key latches .....33&10%
Stearns' sliding door....net $15 00

CABINET.

Eagle.....33⅓%
Yale.....33⅓%
Eagle and Corbin trunk.....25%

PADLOCKS.

Wilcock's.....70%
M. W. & Co.....70%
Russell & Irwin 70%
Slaymaker Barry Co.....40%
Bohannon's brass.....30%
Yale.....net
Eagle 33⅓%
Eureka, Eagle Lock Co 40%
Corbin.....33⅓&10%

MALLETS.

Fiber Head Sterns.....30&10%
Hickory.....40%
Lignumvitæ .....40&40&10%
Tinners', Hickory and Applewood, per doz. .....75c@$1 50

MATTOCKS.

Regular list.....65&5%

MOWERS, LAWN.

Cheap.....all sizes.....2 25
Good.....all sizes, $2 50@$2 75
10 12 14 16-in
High Grade....4.25 4.50 4.75 5.00
Pennsylvania and Continental .....Net price
Genuine Philadelphia Mowers:
Styles M. S., C., K., T., N....70&10%
Style A, (all steel).....60&10%
Style E, Low Wheel.....60&10%
Style E., High Wheel.....70&10&5%
Drexel .....Net prices
Gold Coins.....Net prices
Dewey's.....Net prices
All Day .....Net prices
XX, 12-in. wheel.....60%
Clippers.....50&10&10%

NAIL SETS.

Octagon..... per gross, $8 00@$9 00
Round..... per gross, 8 00@ 9 00
Cannon's Diamond Point, per gross .....$9 00 Net

NUT CRACKERS.

Sargent's No. 12.....$1 50

OILERS.

Tin or Steel.....50%
Zinc.....50&10%
Malleable Hammers 35%
Malleable Hammers, old pat., same list .....Net

PADLOCKS.

Sargent Dog Collar 70%
Sargent Wrought Steel and Brass..80%

PINCHERS.

Carpenters', wrt. iron, pol. steel jaws..... 25
Blacksmiths',..... 40
P. S. & W..... 25

PIPE.

WROUGHT.

List February, 1898.
1¼ and under, plain.....50&2½%
1½ and under, gal.....50&2½%
1½ and over, plain.....50&2½%
1½ and over, gal.....50&2½%
Boiler tubes.....50&2½%

PLANES.

Stanley Planes, No. 100.....$.30 each
" " No. 130..... .25 each

PLIERS AND NIPPERS.

Swedish Side Cutting Pliers 40%
" End " " 40%
" Diagonal " " 40%
Halls Compound Nippers.....40%
U. D. F. & T. Co., all kinds.....Net

PLUMBS AND LEVELS.

Common.....75 to 75&5%
Disston's.....60%

POACHERS.

Buffalo Steam Egg No. 1, per doz. $7 20. 50%

POLISH.

POLISH—METAL.

U. S. Metal Polish Paste, 3 oz. boxes, per dozen, 50c; per gr. $4.50; ½lb boxes, per doz. $1.25; 1 lb boxes, per doz.....$ 2 25
U. S. Liquid, 8 oz. cans, per doz. $1.25; per gr..... 12 00
Barkeepers' Friend Metal Polish, per doz. $1.75, per gr..... 18 00
Universal Paste, 3 oz. boxes.....60%
Burnishine Liquid 5 lb..... 16 00

POLISH—STOVE.

Dixon's .....per gross, $5 75
Dixon's Plumbago.....per lb 6½c

POPPERS, CORN.

Round or Square, 1 qt....per doz., 65%
Square, 1½ qt.....per doz., $1 00
Square, 2 qt.....per doz., 1 00

POST HOLE AUGERS AND DIGGERS.

Iwan's Patent Post Hole Auger....40%
Eureka Perfection Post Hole Digger, per doz.....$10 00
Atlas, per doz..... .... 8 25

POWDER.

IN CANISTERS.

Duck, 1 lb each.....45c
Fine Sporting, 1 lb each.....75c
Rifle, 1 lb each..... ....$1 00

IN KEGS.

Duck, 6½ lb kegs.....$2 50
Rifle, 6¼ lb kegs..... ..... 1 25
Rifle, 12½ lb kegs..... 2 25
Rifle, 25 lb kegs..... ..... 4 00

PRESSES—FRUIT AND JELLY

Enterprise Manufacturing Co.....25%

PULLEYS.

Hay Fork, Svl, Sd Eye, doz $1 75@$2 75
Hot House, Awning, etc.....50%
Japanned Clothes Line.....50%
Japanned Screw.....50&10%
Japanned Side..... .....50&10%
Sash (Auger Mortise):
Common Sense, 1¾ in ..per doz. 19c
Common Sense, 2 in .... per doz. 20c
Empire.... ....17c.; 2 in., 22c

SASH PULLEYS.

Fox No. 3 or No. 7, 2½ wheel, ...25c per doz
Fox No. 9, 1¾ wheel.....30c per doz
Extra for plated Finish... 25c per doz
Extra for Anti-Friction Bronze Bushing.....10c per doz

RAZORS.

Fox Razors No. 42....per doz. $20
" " " 44.... " " 24 00
" " " 82..Platina " 24 00
Discount 40%
Rantankarus..... " 0

REGISTERS.

List Sept. 1, 1901.

All on new list.

Black Japanned Registers, Ventilators, Faces and Borders, ...70%
White Japanned Registers, Ventilators and Faces.....70%
Bronzed Finishes in Imitation of Gold, Silver, Copper or Bronze .....40&10%
Nickelplated .....50&10%
Electro-Plated in Brass, Bronze, Copper or Oxidized Silver 40&10%
White Porcelain.....40&10%
Solid Brass and Bronze Metal .....40&10%

RIVETS AND BURRS.

Coppered Iron Rivets.....60&5%
Tinners Rivets.....60&5%

ROOFING SUPPLIES.

EAVE TROUGH.

"Perfection" Galvanized Eave Trough.....75&10%
"Eclipse" Galvanized Eave Trough.....75&10%
Double Bead Galvanized Slip Joint Eave Trough.....75&10%
Double Bead Galvanized Lap Joint Eave Trough.....75&10%

GUTTERS.

Roof Gutters, Galvanized.....75&10%

PIPE.

Plain Round Pipe, Galvanized, Nested.....70-5%
Plain Round Pipe, Galvanized, Unnested.....70-5%

VALLEYS.

Valleys, in Rolls, IC and IX Terne.70%
Valleys, in Sheets, IC and IX Terne.....70%

HOOKS.

Flashing Hooks.....10%
Wrought Conductor Hooks.....60%

CUT-OFFS.

Kuehn's Galv.....60%
Acme Galv.....10&10%
Acme Tin.....60&10%
Centennial Tin.....20%

EAVE TROUGH HANGERS.

Eave Trough Hangers, Single and Double Bead, Imperial.....15%
Eave Trough Hangers, Single and Double Bead, Wire.....20%

ELBOWS.

One Piece Conductor Elbows, Galvanized, Corrugated..... 60%
Adjustable Elbows, Tin. 50%

PREPARED ROOFINGS.

Imperial 2-ply Tarred Roofing complete.....$1 10 per sq.
Imperial 3-ply Tarred Roofing, complete.....$1 35 per sq.

ROPE.

Per lb
Manilla, 7-16 inch diameter and larger.....9½@10c "
Manila, ⅜ in.....9¼@9¾c "
Manila, ¼ and 5-16 in..... 10½@10¾c "
Sisal 7-16 in. and larger 7@7¼c
Sisal, ⅜ inch .....8@8¼c
Sisal, ¼ and 5-16 in.....8@8¼c
Sisal, Medium Lath Yarn ....9@9¼c

SASH CORD.

Braided, Drab.....lb 25c
Braided, White, common.....lb 19c
Cable Laid Italian....lb, A 18c, B 16c
Common India.....lb 9c@9½c
Cotton Sash Cord, twisted....12@16c
Patent Russia.....lb 12½@13c
Cable Laid Russia.....lb 13½@14c
India Hemp, braided.....lb 14@15c
India Hemp, twisted.....lb 10@12c
Patent India, twisted.....lb 10@12c
Pearl Braided, cotton.....lb 17@18c
Massachusetts, white.....lb 22½c
Massachusetts, drab.....lb 20½c
Eddystone Braided, cotton....lb 19c
Harmony Cable Laid Italian....lb 18c
Ossawan Mills:
Crown, Solid Braided, white..lb 18c
Braided, Giant, white.....lb 17c
Peerless:
Cable Laid Italian.....16c
Cable Laid Russian.....14c
Cable Laid India.....12c
Braided India.....18c
Phœnix, white.....19c
Samson:
Braided, Drab Cotton.....lb 32½c
Braided Italian Hemp.....lb 32½c
Braided, Linen.....lb 49c
Braided, White Cotton, Spot.lb.28½c
Silver Lake:
A quality, Drab, 40c.....15%
A quality, White, 35c.....15%
B quality, Drab, 35c.....15%
B quality, White, 30c.....15%
Italian Hemp, 40c.....15%
Linen, 57½c.....15%

SASH LOCKS.

Ives, Patent.....60@60&5%
Payson's Perfect.....Net
Payson's Signal (new list).....Net

SAWS.

Atkins' Circular.....Net
Atkins' Band.....Net
Atkins' Cross Cuts.....Net
Atkins' Mulay, Mill and Drag.....40%
Atkins' One-Man Saw.....Net
Atkins' Circular Solid and Inserted Tooth.....50%
Atkins' Bands over 2 in. wide.....60%
Atkins' Bands under 2 in. wide.57&10%
Atkins' Mill, Mulay and Drag.... 50%
Atkins' Cross Cuts.....40%
Atkins' One Man.....40&10%
Atkins' Narrow Cross Cuts.....40%
Atkins' Wood Saws and Blades.40&10%
Atkins' Hand Saws.....40%
Atkins' Compass Saws.....50%
Atkins' Butcher Saws.....40&10%
Disston Circular Solid and Inserted Tooth.....50%
Disston Cross Cuts.....Net
Disston Narrow Cross Cuts.....Net
Disston, Mulay, Mill and Drag....40%
Disston Framed Woodsaws.....35%
Disston Woodsaw Blades.....40%
Disston Woodsaw Rods.....25%
Disston Handsaws, Nos. 12, 99, 9, 16, D100, D8, 120, 76, 77, 8.....25%
Disston Hand Saws, Nos. 7, 3.....30%
Disston Compass, Keyhole, etc....25%
Disston Butcher Saws and Blades.35%

SAW FILERS

Stearns'.....25%
Silent saw.....35%
Sargent's.....60&30%
Reading.....37½%

SCALES.

Family, Turnbull's.....30@30&10%
Hatch, Counter:
Platform, 4 lb. by ½ oz..doz...$5.75
2 Platforms, 8 lb. by ½ oz. doz $16 00
Union Platform, Plain.....$1.75@$2.00
Union Platform, Striped,.. $1.85@$2 15
Chatillon's Eureka.....25%
Chattilon's Favorite.....40%
Chatillon's Grocers' Trip Scales ..50%
Pelouze Scales, Household Counter, Confect. Postal, Ice, &c.....50%
"The Standard" Portables.....45%
The Standard" R. R. and Wagon 50%

SCREWS.

BENCH AND HAND.

Bench, Iron.....per doz. 60%
Bench, Wood, Beech..per doz. $3 50
Hand, Wood.....30%

COACH, LAG AND HAND RAIL.

Coach and Lag, Gimlet Point, list Sept. 20, 1899.....75@75&10%
Hand Rail, list Jan. 1, 1871.....75%

JACK SCREWS.

ack Screws.....70%

WOOD.

MANUFACTURERS' CIRCULAR PRICES

New List.
Flat Head Iron.....90%
Round and Oval Head Iron.....85%
Flat Head Brass.....85%
Round and Oval Head Brass.....82½%
Flat Head Japanned.....82½%

SCYTHES.

Blood's.....$ 5 50
Clover..... 5 50
Grain Clipper, Blood's..... 10 50
Hollow Clip..... 5 50
Silver Clip 5 50
Honest Dutchman..... 5 50

SHEARS.

	7	8	9 in.	
Best.....	$16.00	$18.00	$20.00	gro.
Good.....	13.00	15.00	17.00	gro.
Cheap....	5.00	6.00	7.00	gro.

Straight Trimmers, &c.:
Best Quality Jap.....70@70&10%
" Nickel.....60@60&10%
Fair qual. Jap.....80@80&5%
" Nickel .....75@75&10%
Tailors' Shears.....40@40&10%
Acme Cast Shears.....40@40&5%
Heinisch's Tailors' Shears. 40@40&5%
Wilkinson's Hedge 50%
Wilkinson's Sheep.....1900 list, 50%

SHINGLES, METALLIC.

Eastlake I. C. Tin Shingles, painted, pr sq.....$4 25
Eastlake I. C. Tin Shingles, galvanized, pr square.....$6 00
Octagon Fluted I. C. Tin Shingles, painted, per square..$5 50
Octagon Fluted I. C. Tin Shingles, galvanized. pr sq....$7 25

SIFTERS.

Eclipse.....per gr $15 00
Hunter's Genuine.....per gr $16 00

SKATE SHARPENERS.

Skate Sharp., Eureka, per doz $2 00 net
Washer Cutters, Woodard's, per doz.....$2 50 net

SLATE.

GENUINE NO. 1 BANGOR.

24x14, 24x12, 12x 8 } $3 50 pr sq. } 20x10, 18x10, 18x 9, 16x 8 } $4 50 pr sq
22x11, 20x12, 18x12, 16x12, 14x10, 14x 8, 14x 7 } $3 75 per sq. } 16x10, 16x 9 } $4 25 pr sq; 12x 7, 12x 6 } $3 25 pr sq

GENUINE NO. 1 BANGOR RIBBON.

24x14, 24x12 } $3 00 pr sq. } 20x10, 18x10, 18x 9 } $3 50 pr sq
22x11, 20x12, 14x 8, 14x 7 } $3 25 pr sq. } 16x10, 16x 8

SNAPS.

German.....40@40&10%
Covert Mfg. Co.:
Derby.....35&2%
High Grade.....45@2%
Jockey.....40&2%
Trojan.....45&2%
Yankee.....35&2%
Yankee, Roller.....30&2%
Covert's Saddlery Works:
Banner.....60&10%
Crown.....60&10%
Model.....60&10%
Triumph.....60&10%
W. & E. T. Fitch Co.:
Bristol.....40&10%
Empire.....50&5%
German.....40%
National.....50&5%
Perfect.....45%
Clipper.....50&5%
Champion.....40%
Security.....40%
Victor.....60&5%
Oneida Community:
Solid Steel.....65@65&10%
Solid Swivel.....65&10@65&10&10%
Sargent's Patent Guarded...60⅔&10%

SOLDERING FURNACES.

No. 3 Gems tin reservoir.....$6 00
No. 6 Gems copper reservoir..... 8 50
Gem Gas Pots..... 3 25
Clayton & Lambert No. 1 Fire-Pot 6 00
Clayton & Lambert's Special Fire-Pot..... 4 50

SPRINGS, DOOR.

Star (Coil) list Oct. '95.....net
Torrey's Rod 39 in. Per doz. .....$1 20@$1 25
Warner's No. 1.....net 75

SQUARES.

Steel and iron..... 70&10%
Nickel plated..... 65, 10&5%
Try squares and bevels..... 65, 10&5%
Disston's..... 45%
Bemis and Call, pocket.....30%
Winterbottom's try & mitre..... 30%
Starrett's.....25%

STAPLES.

Barbed Blind .....per lb., 10c
Poultry Netting.....per lb., 5c

STAPLE PULLERS.

Russell Staple Pullers..per doz., $9 00

STOVE PUTTY.

1, 10 & 25 pound Cans.....per lb., 5c
500 pound Kegs.....per lb., 4½c

STROPS.

RAZOR.

Emerson.....60 to 60&5%
Imitation.....20, 10&5%
Torrey's.....20%
Tower & Lamont.....per doz $4 00
04 Combination.....per doz 3 75

TACKS.

List Jan. 15, '99.
Carpet Tacks, American.....90&10%
American Cut Tacks.....90&10%
Swedes Iron Tacks.....90&20%
Swedes Upholsterers' Tacks.....90&20%
Gimp Tacks .....90&20%
Lace Tacks .....90&20%
Trimmers' Tacks.....90&20%
Looking Glass Tacks .....70&10%
Bill Posters' and Railroad Tack90&10%
Hungarian Nails.....80%
Common and Patent Brads....80&10%
Trunk and Clout Nails.....75&10%

TRAPS.

GAME.

Oneida Pattern .....75&5@75&10&5%
Newhouse .....45@50%
Hawley & Norton.....65@5&70%
Victor (Oneida Pattern) .. 75@75&10%
Star (Blake Pattern) ....65&10@70&5%

MOUSE AND RAT.

Mouse, Wood, Choker, doz. holes 10c
Mouse, Round or Square Wire, doz.....$0.85@1.00
American Pattern French Rat and Mouse Traps—
No. 1, Detroit Marty Pattern, per doz. $4.50; in ½ gro. lots, per doz $4.00
No. 2, Detroit Marty Pattern, per doz, $3.25; in ½ gro. lots, per doz.....$3.00
Detroit Marty Pattern Mouse, per doz. $2.00; in ½ gro. lots, per doz.....$1.75
Diamond Joe Mouse Traps, per doz.....60c
Diamond Joe Rat Traps, per doz.$1.00
Marty French Rat and Mouse Traps (Genuine:)

TWINE.

Flax Twine—	BC	B
No. 9, ¼ and ½ lb. Balls...	20c	24c
No, 12, ¼ and ½ lb. Balls ...	17c	20c
No, 18, ¼ and ½ lb. Balls ...	14c	17c
No. 24, ¼ and ½ lb. Balls...	14c	17c
No. 36, ¼ and ½ lb. Balls...	13c	16c

Chalk Line, Cotton, ½ lb. Balls18@20c
Cotton Wrap., 5 lb. Balls to lb 16 to 20c
2-Ply Hemp, 1½ lb. Balls (Spring Twine) .....12@15c
3-Ply Hemp, 1 lb. Balls.....12@15c
3-Ply Hemp, 1½ lb. Balls .....
2, 3, 4 and 5-Ply Jute, ½ lb. Balls.... 8c
Mason Line Linen, ½ lb. Balls 45c
No. 264 Mattress, ¼ and ½ lb. Balls 34c
Wool.....5½@6c

VISES.

Solid boxes.....40%
Parker's.....20%
Howard's.....35%
Bonney's.....35%
Trenton.....40%
Stearns'.....50%
Cheney's.....12½%
Massey's.....25%
Parallel.....30&5%
Holland's.....35%
Stevens'.....25%
Miller's Falls.....40%
Prentiss.....20%
No. 1, Rat each $1.12½; per doz. $12.00
No. 3, Rat, per doz. $6 00; case of 50.....$5.25 doz.
No. 3½, Rat, per doz $4.75; case of 72.....$4.25 doz.
No. 4, Mouse, per doz. $3.50; case of 72.....$2.75 doz.
No. 5, Mouse, per doz. $2.75, case of 72.....$2.25 doz.
Schuyler's Rat Killer, No. 1, per gro. $30.00; No. 2, per gro. $30.00; Mouse, No. 3, $18.00.....50%

FLY.

Balloon, Globe or Acme..... doz $1.15@1.25; gro. ... $10.50@11.00
Harper, Champion or Paragon.... doz. $1.25@1.40; gro....$12.00@12.50

TROWELS.

Disston Brick and Pointing 30%
Disston Plastering.....25%
Disston "Standard Brand" and Garden Trowels.....40%
Never-Break Steel Garden Trowels..... gro. $7.00
Peace's Plastering.....30%
Rose Brick and Plastering.....25&5%
Woodrough & McParlin Pl'st'ring.

WASHERS.

LEATHER, AXLE—

Solid .....80&10&10@85%
Patent.....85&10@85&20%
Coil: ⅞ 18c, 1 19c, 1⅛ 20c, 1¼ inch. 23c per 100

IRON OR STEEL.

Size bolt 5-16 ⅜ ½ ⅝ ¾
Washers $5.20 $4 30 $3.00 $2.80 $2.60
In lots less than one keg add ¼c per lb; 5-lb boxes add ½c to list.

CAST WASHERS.

Over ½ inch, barrel lots per lb .....1½@1¾c

WELL WHEELS.

8-in., $2.20.....10-in., $2.60
12-in., $3.25.....14-in., $3 25

WIRE AND WIRE GOODS.

Brt. and Ann., 6 to 9, 70&10@70&10&5%
Brt. and Ann., 10 to 18, 72½@72½&10%
Brt. and Ann., 19 to 26, 75&7½@75&10%
Brt. and Ann., 27 to 36.....75&10&5@75&10&7½%
Cop'd and Galv., 6 to 9, ...70@70&10%
Cop'd and Galv., 10 to 18.....70&10@70&10&5%
Cop'd and Galv., 19 to 26.....75&7½@75&10%
Cop'd and Galv., 27 to 36.....75&10@75&10&5%
Tinned, 6 to 14 .....75@75&5%
Tinned, 15 to 18 .....70&5@70&10%
Tinned, 19 to 26.....70@70&5%
Tinned, 27 to 36 .....65&10@70%
Annealed Wire on Spools.....70&5@70&10%
Brass and Copper Wire on Spools .....60&5@60&10%
Brass, list Feb 26, '96.....25%
Copper, list Feb. 26, '96.....15%
Cast Steel Wire.....50%
Stubs' Steel Wire, $6.00 to £.....40%

BRIGHT WIRE GOODS.

List April 1, 1901.....85&20 to 85%

WIRE CLOTH AND NETTING.

Galvanized Wire Netting.....80&10%
Ptd Screen Cloth per 100 ft.....$1.20
Light Hardware Grade:
2-8 Mesh. Plain (8c list) sq ft... 1¼c
2-8 Mesh. Galv. (8c list) sq ft ...2¼c

WRENCHES.

Agricultural.....70&10%
Case lots.....75&10%
Acme.....60&5%
Baxter's S.....60&10%
Bull Dog.....70%
Coe's Genuine.....40&10&5%
Coe's "Mechanic's"..40&10&10&5&5%
Alligator.....60&10&10%
Bemis & Call's:
Adjustable S.....35&5%
Adjustable S Pipe.....40%
Briggs' Pattern.....30&10%
Combination Black.....40&5%
Combination Bright.....40%
Cylinder or Gas Pipe.....55%
Extra Heavy.....45%
Merrick's Pattern.....50%
No. 3 Pipe, Bright.....55%
Bindley Automatic.....30%
Boardman's 33⅓%
Donohue's Engineer.....40&10%
Eagle.....50&10%
Gem Pocket.....30%
Hercules.....70%
Knife Handle, Machinists' (N & B.):
Case lots.....50&5%
Less than case lots.....0%
Improved Pipe W. & B.).....50&10
Ric Handles P. S. & W.....&10 &
Soveensor.....

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE, for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS.—H. W. T. JENNER, Patent attorney and mechanical expert, 608 F street, Washington, D. C. Established 1863. I make an examination free of charge and report if a patent can be had and exactly how much it will cost. Send for circular. Member of Patent Law Association.

PATENTS HUBERT E. PECK, 623 F St., N. W. Washington, D. C. Consulting Expert in Patent Causes, U.S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—Entire patent of grain sack holder. The only perfect one on the market. Address Box 211, Wheaton, Minn. 20

Farm Implement Business For Sale—In a live town with good territory. Will trade for unimproved real estate. Write J. N. Silver, Clarkfield, Minn. 20

For Sale—A well established General Hardware Business and Farm Implements, invoice $8,000 to $9,000; in a lively town of 7,000, in Northwestern Iowa. Good crops, water works, good schools. Will take part in land at cash value. Good reason for selling. Address "Lively Town," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 20

For Sale—I have 1,040 acres choice land in the famous Red River Valley, where values are fast advancing and crop failures unknown, any part of which I will exchange on an equitable basis for stock of hardware and furniture, well located. Address "Exchange," Aberdeen, So. Dak. 20

Wanted—Tinners to increase their means by soliciting subscriptions for THE AMERICAN ARTISAN. Liberal commissions. 19

For Sale—Good hardware and harness business. No opposition. Invoice twenty-five hundred. Hardware, Larrabee, Ia. 19

For Sale—A1 Stock of Hardware, $4,500; good established trade, doing more business this year than ever before. Good reasons for selling. Worth investigating quickly. Just the place for energetic man to make money. Address "A. B. C," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

Wanted—Complete line of gasoline and Blue Flame Oil Stoves to job by reliable old stove house in Chicago Address "Jobber," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

For Sale or Exchange—A splendid hardware, buggy, harness and implement business with or without building. Address "Business," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

Wanted—To buy tin shop in small but growing town. None but North Western states considered. Address "No. 64," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

TINNERS' TOOLS.

For Sale—Or will trade for 30-inch squaring shears: one circle shears, one large or small, P. S. & W. encased burring and turning machines; all good as new. J. H. Holton, Red Wing, Minn. 19

For Sale—One pair Peck, Starr & Wilcox Formers, 1½x30 inch rolls, in first class condition; must be sold at once, make me an offer. Geo. S. Bowers, Mabel, Minn. 20

Fitch Mfg. Co., of Wayland, Mich., want to purchase a second hand machine to make gauge glasses for cream cans; 1.30 inch dop folder also. 18

For Sale—One 4-foot mandrel, one 20-inch folder, one gasolene firepot, two machine standards, a small quantity of nickel plated tubing, 1 inch thick by 16 inches long. Address James W. Brown, Chalmers, Ind. 18

Wanted—A 6 or 8 ft. Keen or Robinson Brake. Address "K. & F." care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 17

For Sale—One large P. S. & W. burring machine, good as new, one No. 1P. S. & W. grooving machine, good as new, excepting it needs a new spring. Address Lock Box 8, Pearl City, Ill. 15

For Sale—A cone former that will form a 14 in. cone, made by Niagara Tool Co.; also, 800 4-in. cream can gauges. For Further information, address E. G. Coe, Sparta, O. 14

HELP WANTED.

Help Wanted—Metal Pattern Maker, who has experience in molding, lath work and of making master patterns; a general all around man wanted, steady work for the right party. Address with reference, 219-221 W. 2nd St., Cincinnati, O. 20

Wanted—A salesman visiting the hardware trade, who can carry a line of first-class warm air registers to advantage. Address "T. W.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 20

Tinner Wanted—At once; a first-class man who understands cornice work. Wages $3.50 per day and 9 hours. Joseph Schwartz, Bisbie, Arizona. 20

Wanted—Two men, one for Illinois, one for Iowa, to carry as a side line "Stove Repairs." Salary or commission basis. With the presentation of our plan, nine out of ten merchants will give you their business. "X. Y. Z.," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 20

Wanted—Live young man and tinner to buy half interest in well established tin and hardware business; I have more than I can look after. Eleven hundred or invoice takes half interest. Store 18x85 ft. D. H. Allison, 816 Fifteenth St., Denver, Colo. 20

Wanted—At once, 3 Good Tinners and Furnace Man. Steady work all year and good wages. D. F. Fuerst, Kewanee, Ill. 20

Wanted—Stove Foundry Foreman. Must be an A1 man. Location near Chicago. Address "A1 Foundry," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 20

Wanted—An A No. 1 Tinner; steady job to right man. Address, Louis O. Schuetz, 904 Chicago Avenue, Evanston. 19

Wanted—A good all-around German tinner and furnace man; one who has some knowledge of plumbing and clerking in store. Good wages and steady work the whole year to the right man; give references and wages expected. Th. Hansen, Holstein, Ia. 19

Wanted—A first class Tinner and Cornice Worker; a man that can take charge of hands. No drinking man need apply, address No. 313 and 315 Main St., Baton Rouge, La. 19

Wanted—Two first class tinners at once for job shop. Address, John C. Distler, Mishawaka, Ind. 19

Plumber and tinner, or, two in one, wanted at once or later until obtained; steady job for hardware, tin shop, plumbing and furnace work. Advise, with particulars, personality, wages, etc., H. W. Williams, Waupaca, Wis. 18

Wanted—A first-class salesman who thoroughly understands steam and hot water heater and furnace business. Apply with full information and references. Address "Thorough," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

Wanted—A first-class stove salesman (traveling) must be experienced. Apply with particulars and references to "Box First," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

Tinners Wanted—At once: five good tinners; steady work and good pay to good men. Address, J. B. Wright, Monroe, La. 18

Three good plumbers and one good cornice man wanted at once. Steady job to right men. Good wages. H. J. Klinsman Co., Rochester, Minn. 18

Wanted—At once; First Class Tinner; one who understands pumps and general work in country shop. Good wages and steady work to the right man. Address at once, enclosing reference, Skinner & Richards, Collinwood, Ohio. 18

Wanted—Tinner and Plumber. For good man good wages and steady work. Address 3 Manley Bros., Harvard, Ill. 18

Wanted—Salesman familiar with general line of hardware. Address "Hardware," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

Lots of work for FIRST CLASS tinners in Denver, Colo.; good wages. Address D. H. Allison, 816 15th St., Denver, Colo. 18

Wanted—Manager for Tin Plate Sales Department. Must be a good correspondent and thoroughly versed in all grades of tin plate. Long experience in the marketing of high grade plates very essential. State fully past experience and salary expected. Address Box No. 472, Canton, Ohio. 18

SITUATIONS WANTED.

A Traveling Man—Who is a successful saleman in Illinois, desires a position with a leading house. He has always had trade on leading trade mark goods, has a high record and wide acquaintance in Illinois. Address "Busy," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 20

An Energetic, Capable Man—Desires position as manager of sales. Is at present traveling and has had long road experience. Has had some desk training. Address "Energy," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 20

Wanted—Position as tinner or pattern cutter by A. 1 workman of 16 years' experience in all branches. Married and temperate. References exchanged. Address, A. W. Birkhauser, No. 1324 Harrison St., Davenport, Iowa. 20

Situation Wanted—After Jan. 1st, 1902, by a first class, sober tinner, with twenty years' experience. Especially good on assortment. Address, Tinner, No. 608 Fallowfield Ave., Charlevoi, Pa. 20

Wanted—At once, position as tinner, plumber, hot water and steam heater; furnace work and all general job work. Sober, steady; the best references. Address "G. O." care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

Wanted—Second hand 30 in. tin folder and 36 in. rollers; must be cheap. Address "Furnace," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

Situation Wanted—By Tinner; 11 years' experience at in and outside, furnace, pump and pipe work. Address, B. D., 197 Park Ave., Chicago, Ill. 19

Situation Wanted—By a tinner of eight years' experience; am no plumber nor pump man; understand furnace and all kinds of tin work; state wages by week. Address "O. K.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

An experienced stove and furnace SALESMAN, having a practical knowledge of warm air heating and also thoroughly familiar with gas appliances, and having an extended acquaintance with the stove trade in Eastern Ohio, West Virginia and Western Pennsylvania, including Pittsburgh and vicinity; is desirous of corresponding with a firm making a line of goods adapted to the above territory, and who desire to extend or increase their business in that district relating to an engagement for 1902. "St. Clair," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

Wanted—Situation for 1902; by an experienced man, in heating, ventilation, tinning and plumbing; 15 years experience; strictly temperate; am competent to take charge of shop and handle men to good advantage; can estimate and work from plans; am also fairly good draftsman; place must be steady, at first class wages. Address "1902," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 19

Situation Wanted—By a good all around tinner at in and outside work; would like a job at once in a town of 1,000 to 1,500 in N. D., S. D. or Ia., but will go anywhere; am honest and sober and a single man of 25 years; can clerk in store if necessary. Address "Rota," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

Wanted—A salesman of experience and extensive acquaintance in Illinois, Iowa and the west; desires an engagement for 1902, with a first class Stove and Range Mfg. Co. or Tin-plate, Iron and Pressed Ware Co.—Chicago and St. Louis references. Address "B Stove," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

Situation Wanted—By party, on or before Jan. 1, who has had plenty of experience in hardware and furniture store. Can do pump, wind mill, furnace work and at home in the furniture and stove trade. Capable of doing buying in all lines if necessary. Good habits and not afraid of work. Address "Good Habits," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 19

Situation Wanted—At once; by a young man of 20 years, with a number of years' experience at in and out side tin work. Have some knowledge of furnace and iron pipe work. Address, "Box 179," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 18

Wanted Situation—By a hardware clerk, fully capable in the average hardware stock, either wholesale or retail. Would desire to contract with reliable firm for one year, either city or country. Best of city references. Address Box 263, Madrid, Boone Co., Ia. 20

SPECIAL NOTICES.

SALESMEN WANTED.

Apply by letter only. Give age, experience, salary expected and references. Please do not apply unless you have had actual experience on the road in selling the trade.

DETROIT STOVE WORKS,
20 **Chicago, Ill.**

SPECIAL NOTICES.

WANTED.

Salesmen who call on retail furniture, hardware, dry goods and general store trade, to carry a desirable and profitable side line. No samples necessary—sales from photographs. Address

"Box Re,"

care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 20

WANTED.

Salesman with established trade to sell Gold Coin Stoves in Kansas, Nebraska, Illinois, Minnesota, North Dakota, Northern Missouri and Southern Iowa. Address 20

THE CHICAGO STOVE WORKS,
BLUE ISLAND AVE. & 22ND ST.,
CHICAGO, ILL. 20

Salesmen Wanted
For Iowa, Kansas and Nebraska

Must have knowledge and experience in selling stoves, inasmuch as one of the leading lines of stoves and ranges is to be represented. Position a lucrative one in each case. Address "Box 20," care of THE AMERICAN ARTISAN, 69 Dearborn Street, Chicago, Ill. 20

An A1 road man, who contemplates making a change, will entertain a proposition to travel in the territory between Chicago and Buffalo. Am thoroughly posted in the following lines: Granite iron and tinware, gas and gasoline stoves and hardware specialties. Have covered this field for ten years and have a large acquaintance. Address

"Traveler,"

care THE AMERICAN ARTISAN, Chicago. 17

A large metal house wishes competent man to manage its branch at Chicago. Only those of experience, integrity, possessing good references need apply. Address,

"National,"

Care of THE AMERICAN ARTISAN,
19 CHICAGO, ILL.

WANTED.

Western agency for leading manufacturers of hardware specialties, iron novelties, house furnishing specialties, etc. Address 16

Wm. Cerf,
254 Franklin St., CHICAGO.

MONTAGUE COHEN
39 PARADISE ST.,
LIVERPOOL, ENGLAND

Can accept the agency for a few lines of American manufacture in British Isles and Continental Europe. Will give prompt attention to same. Can furnish references. 16

SPECIAL NOTICES.

Salesman Wanted.

Experienced tack salesmen can secure good line by addressing

TOWER MFG. CO., Cincinnati, O.

In the world's broad field of battle,
In the struggle for the prize,
Be not like dumb, driven cattle,
Be a master—advertise.

STOVE DEALERS
will make money and save money by using
DIXON'S GRAPHITE CEMENT.

There is nothing equal to it for repairing fire brick in stoves, furnaces, etc.
Let us send you sample and prices.

JOSEPH DIXON CRUCIBLE CO., - Jersey City, N. J

DON ADAMS,
MORNING SUN, IA.,
WRITES:

"I subscribed for your paper one day, and obtained a position the next day."

Books by Mail

The Publisher of the American Artisan will take pleasure in supplying Books of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are lines specially represented:

Sheet Metal Working. The Foundry. The Workshop. Heating and Ventilating. Plumbing and Drainage. Bicycle Repairing. The Store and Office.

Daniel Stern,
Publisher and Bookseller,
69 Dearborn St. CHICAGO.

CUT THIS OUT.

To the Publishers THE AMERICAN ARTISAN,
69 Dearborn St., Chicago.

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars, for one year's subscription, or 50 cents in case we decide to discontinue.

NAME _____

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TOWN _____

STATE _____

Peoria Washing Machines.

BEST IN THE MARKET.
MADE WITH BALL-BEARINGS.

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.
Send for Catalogue.
Secure the Agency.

CLARK, QUIEN & MORSE,
PEORIA, ILL.

Gee Whizz.

(Double reflex, and adjustable.) Washes in one minute what it takes any other machine 10 or 15 minutes.

Noted for its easy running, ease on clothing, and fast, unexcelled work. New Gee Whizz Machines are lined with galvanized metal, thus insuring them not to leak, and to stand any climate. Absolutely guaranteed to give entire satisfaction.

You want the exclusive agency.

Manufactured by

Capt. Randleman & Sons,
DES MOINES, IOWA.

THE ORIGINAL
BRAMMER Rotary Washer.

An especially well made and light running machine and GUARANTEED TO GIVE SATISFACTION.

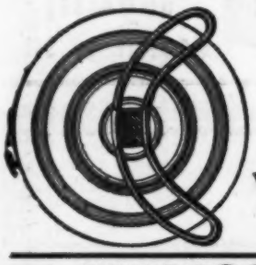
A simple, powerful and durable movement. This very substantial tub is made from a select quality of Cypress lumber.

Made also in the detachable leg style, as well as square.

We manufacture the most complete and satisfactory line of Washers on the market. Send for illustrated catalogue.

BENBOW-BRAMMER MFG. CO.,
1007 N. 13th Street,
FACTORIES: St. Louis, Mo., Davenport, Ia.
ST. LOUIS, MO.

THE Peerless Flue Stopper



Steel wire springs instead of sheet iron stays.

Stays where you put it, and is absolutely soot and smoke proof.

Made either plain or decorated.

Send for miniature sample and prices.

Welling Manufacturing Co.,
Columbus, O.

BIG FOUR ROUTE

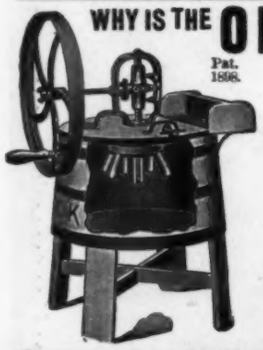
Chicago to { Indianapolis, Cincinnati, Louisville, the South and Southeast

Peoria, St. Louis, Indianapolis, Cincinnati, Louisville } To New York AND The East

W. P. DEPPE, A. G. P. & T. A.
W. J. LYNCH, G. P. & T. A.
CINCINNATI.

J. C. TUCKER, G. N. A., 234 Clark St., Chicago

WHY IS THE OK THE BEST ROTARY Washing Machine?



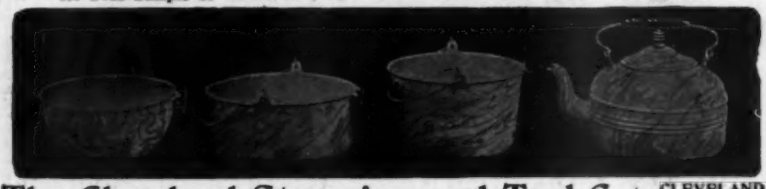
Pat. 1896.

BECAUSE

1.—It is the only Rotary Washer that has **Revolving Steel Ball Gearing**, reducing **the friction** and thus making machine so **light running** and almost **noiseless**.
2.—The tub is made of **Louisiana Red Cypress Lumber**, cherry finish; the legs are **solid with tub**, (not removable, breakable legs fastened with screws).
3.—The wheel turns right or left, pin wheel or dasher reverses automatically, turning the clothes back and forth through the hot soap-suds, and cleaning them without **rubbing** them to pieces.
4.—This washer is made by **experienced mechanics**, and will outlast any other washer on the market.
5.—The tub has a wringer box fastened with steel brackets.
6.—The lid on tub closes tight, **no escape of steam.**

MANUFACTURED BY
H. F. BRAMMER MFG. CO., Davenport, Iowa.

Send 10c. in Stamps for Free Sample of "Solid-Steel" Lava Enameled Ware.



The Cleveland Stamping and Tool Co., CLEVELAND, OHIO.

H. Koch & Son, New Baden, Ill., Write:

"Please discontinue our advertisement, for we have more inquiries than we can answer; besides, we are very thankful, having now a man to fill the position O. K. We will always remember

The American Artisan

and would not be without same"

Frank Cornelius, Oshkosh, Wis., writes:

"I have all of your Manuals up to date, and they make quite a nice encyclopedia, and I often refer to them. They are certainly a great help, and should be of especial use for the younger class that are trying to become good machinists."

ROOFS need to be protected and the best protection for iron, tin and shingle roofs, iron clad and wooden buildings, bridges, cars, etc.; is the **Buckeye Standard Creosote Paint**, made from the best oxides, ground in pure linseed oil.

Buckeye Paint & Varnish Co., Toledo, O.

TEN TO ONE

you know the difference between **ORIGINAL STOVE REPAIRS** and the ordinary kind, but if not, let us demonstrate to you as we have done to others the fact that there is a vast difference—and in our favor. Ask for ORIGINAL ORDER BOOK when ordering.

UNION STOVE REPAIR CO.,
2852-2854 Archer Avenue, CHICAGO.

SAMPLES SENT FREE to Stove Dealers

This New Patent Prepared Dry Stove Polish—it Mixes Quicker—Shines Quick and Easy—Black and Brilliant Waterproof and Rust-proof—Keeps any length of time—Never Spoils—Cheapest Polish in the Market—1 Box will do as much work as 15 lbs. of Paste—Size of Box, 10½ L x 8¼ Deep, 6 in. Wide.

AYLING BROTHERS,
Address Department A. 8-14 Haddon Ave., CHICAGO, - - ILL.

Black Silk

Stove Polish is as much blacker than blacking as blacking is blacker than black coffee. Put up in sizes to suit. This polish is IT when it comes to fineness and goodness. Write for Prices.

Lewis D. Wynn,
Sterling, Ill.

EVERY TINNER

Will find THE AMERICAN ARTISAN Cost Price List of Tinware Per Piece An Indispensable Help in His Business. The Table, prepared by D. H. Metcalf, shows the cost of Tin Per Sheet, Number of Sheets of Tin in Each Article, the Number for a Day's Work; The Cost of the Material, including Tin, Wire, Solder, Covers, Trimmings, etc., with Tin Plate, at any price per box; the cost of Tin per sheet at any price per box; the cost of making, with wages, etc. Only a Few Left. They will be sold while they last for

$1.00 each.

DANIEL STERN,
69 DEARBORN ST., - - CHICAGO.

REPAIRS FOR ALL STOVES

Pipe Dampers, Mica, Stove Rods, Paste, Stove Putty, Stove Knobs, Etc.

Wm. T. Dust Co.,
231 Brush St., DETROIT.

STOVE REPAIRS.

We have the patterns of the CHICAGO & ERIE STOVE COMPANY, and can furnish repairs for said stoves.

THE DEPINET FOUNDRY COMPANY.
ERIE, PENNA.

REPAIRS FOR ALL STOVES AND RANGES.

A. G. Brauer, 316-318 North Third St., ST. LOUIS, MO.

Champion Stove Clay

The only Stove Lining made of crucible materials.
Packed in 2½ lb., 6 lb., and 10 lb. pasteboard boxes and also in bulk.
Order it from your jobber.
The best and most refractory lining made.

BRIDGEPORT CRUCIBLE CO.
BRIDGEPORT, CONN.

Handy Riveter.

Just the thing for mending broken harness, straps, belts, etc. Dealers can sell them to every farmer, liveryman, mechanic, engineer, driver and harness maker. They can be carried in the pocket. Weight is only 5 ounces. They will clinch any size of tubular or bifurcated rivet and make a perfect job.

Milwaukee Automatic Machine Co. MILWAUKEE, WIS.

Ask Your Dealer For The **GEM SOLDERING FURNACE** AND YOU WILL MAKE NO MISTAKE

Always Ready.
No Smoke.
No Odor.
No Noise.
Unexcelled.
Unequaled.
Unrivaled.
Safe, Sure. Durable.
Thirty Years Experience.
Made Only By

Burgess Soldering Furnace Co.,
COLUMBUS, OHIO, U. S. A.

FOR **MICA**

Sheet, cut or uncut, Powdered and Flake
WRITE TO
ASHEVILLE MICA CO.
ASHEVILLE, N. C.

DO YOU WANT **STOVES AND HEATERS** that are easily sold and STAY SOLD. We have been very successful in designing patterns for such.

The Gobeille Pattern Co.
CLEVELAND, OHIO.

PATTERNS
UP TO DATE
Wood and Metal for Stoves, Ranges and Furnaces to Order.
W. L. MERSFELDER,
400 East Pearl, CINCINNATI, O.

THE GEO. W. COPE
STOVE PATTERN WORKS,
Randolph and Atwater Sts.
DETROIT, MICH.

Experience. Correctness.
Acme Pattern Works
STOVE and HEATER
Patterns
AKRON, OHIO.
Promptness. Satisfaction.

The Indianapolis Artistic Pattern Works.
Special Stove and Furnace Patterns.
Ornamental and Experimental Patterns.
Perfect Work. Right Prices.
Cor. Fenneman and Minnesota Streets.

J. N. FEYDER
OSCEOLA MILLS, WIS.—Writes:

"Please discontinue my ad for a tinner. I have inquiries for the place every day."

AD-EL-ITE SPECIALTIES ARE LEADERS AND MONEY MAKERS.

MAKE YOUR HOME attractive and beautiful by using

AD-EL-ITE TINTED ENAMELS

—weather and wear proof—

PERFECT DURABLE LUSTROUS

Refinish your iron beds, walls, furniture and a thousand other articles at a trifling cost. Attractive advertising matter and signs. A good, live dealer wanted in every town. Further particulars free.

ADAMS & ELTING CO., Chicago.

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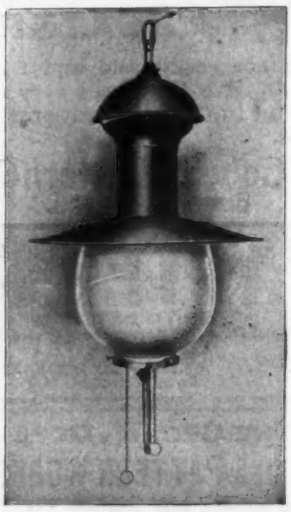
DEUTHER & BECK, Buffalo, N. Y.
CLEVELAND WINDOW GLASS CO., Cleveland, O. BONNER & PRESTON CO., Hartford, Conn. BRIDGES McDOWELL CO., Louisville, Ky.



We Pay the Freight on the wonderful one-gallon

Doran Lighting System

Equal in every way to an Electric Arc Light at a cost of about one-tenth as much.

It can be turned up or down at will by simply pulling a chain.

The gasoline is conveyed to the lamp through seamless wire tubing running from a tank situated outside of the building. The tubing is flexible and can be put through crevices, around corners and concealed the same as an electric light wire.

As many lights as may be desired can be placed on one system.

The outfit meets in every way the requirements of the National Board of Fire Underwriters and Insurance Companies will issue permits for its use without charging extra premium.

We Give an Absolute Guarantee for One Year.

SPECIAL 30 DAY OFFER.

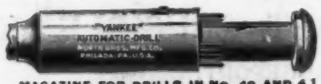
We wish to introduce these lamps into every town in the United States, therefore, for the next 30 days we will prepay the freight on a sample outfit to any point within 1,000 miles from Chicago. In accepting this offer you are risking nothing, for if the outfit is not entirely satisfactory to you it can be returned at any time, within 30 days from date of shipment.

Write for Catalogue and Complete Price List.

Acorn Brass Works,

WE PAY THE FREIGHT. Dept. H, 18-23 So. Jefferson St., CHICAGO, ILL.

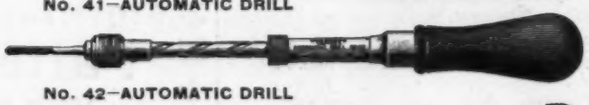
"Yankee" Drills



MAGAZINE FOR DRILLS IN No. 40 AND 41

No. 40—AUTOMATIC DRILL, WITH RATCHET MOVEMENT

No. 41—AUTOMATIC DRILL



No. 42—AUTOMATIC DRILL

No. 50—RECIPROCATING DRILL FOR WOOD OR METALS

Sold by Leading Jobbers. Send for "Yankee" Tool Book.

North Bros. Mfg. Co., Philadelphia, Pa.

Good Advertising

Means Constant Advertising.

MONEY spent on this account during periods of prosperity brings its fullest returns in dull times. Don't let your customers forget you simply because you are busy now. Keep your name before the public.

Locations for Industries.

Manufacturing is rapidly developing along the lines of the Chicago, Milwaukee & St. Paul Railway. Industries on a large scale now extend to the Mississippi River with indications of reaching the Missouri. Machinery and all the higher classes of manufactured goods are now being exported from this business territory to all parts of the world.

The Chicago, Milwaukee & St. Paul Railway Company's 6,600 miles of railway, exclusive of second track, connecting track or sidings, traverses eight states, namely:

NORTH DAKOTA	MINNESOTA	NORTHERN MICHIGAN
SOUTH DAKOTA	IOWA	WISCONSIN
Express Passenger Trains, Fast Freight Trains Throughout.	MISSOURI	ILLINOIS

which comprise a territory full of natural resources and advantages. This railway is geographically well located in relation to the great markets and distributing centers. Beyond its lines is a vast and rapidly developing territory extending to the Pacific Coast.

The Company gives unremitting attention to the development of local traffic along its lines and, with this in view, seeks to increase the number of manufacturing plants on its system, either through their creation by local enterprise or the influx of manufacturers from the east. It has all its territory districted in relation to resources, adaptability and advantages for manufacturing. Specific information furnished manufacturers in regard to suitable locations. Address,

LUIS JACKSON,
Industrial Commissioner C., M. & St. P. R'y.
660 Old Colony Bldg., Chicago, Ill.

Steam Heat and Open Fires.

French Lick Springs

In the Indiana Highlands on the

Monon Route

Hotels Open all the Year Round.
Two Trains Daily from Chicago.
Through Sleeper from Dearborn Station, 9 p. m.
Send for booklet.
City Ticket Office, 232 Clark St.
FRANK J. REED, G. P. A., Chicago.

If you wish your prosperity to be continuous make your advertising continuous. One begets the other.—The World.

A MESSAGE FROM MARS SAYS IN CLIMBING UP HERE WE USE ONLY THE BEST WE CAN BUY. YOU WILL FIND IT ILLUSTRATED IN THE **GREEN BOOK** OF HARDWARE SPECIALTIES. THAT'S WHERE WE FOUND IT.

Thomson Bros. & Co.

Utica Drop Forge & Tool Co.
Ask your dealer for these goods.

Smith & Hemenway Co.
296 Broadway, NEW YORK CITY.

Stanley Rule and Level Co.

IMPROVED CARPENTERS' TOOLS **Sold by All Hardware Dealers**
NEW BRITAIN, CONN.

No other "Just as Good" as the

Enterprise Food Choppers

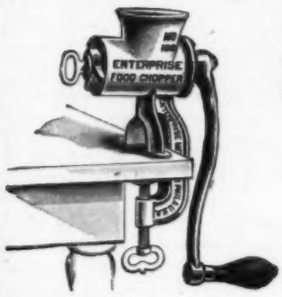
TINNED

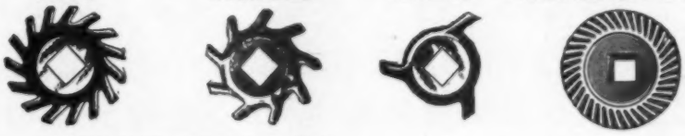
Now made in TWO sizes

No. 100, chops 2 lbs. per minute, $1.50
No. 300, chops 3 lbs. per minute, $2.25

FOUR KNIVES WITH EACH MACHINE

Fine Medium Coarse Nut Butter Cutter





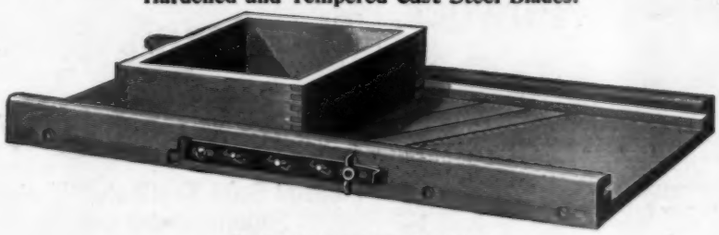
Order from your Jobber
Catalogue mailed Free

The Enterprise Mfg. Co. *of* Pa.
Philadelphia, U. S. A.

New York Branch, 10 Warren Street
San Francisco Branch, 105 Front Street

DISSTON'S
Slaw and Crout Cutters

Made From Well Seasoned Cherry Lumber
Hardened and Tempered Cast Steel Blades.



Adjustable Crout Cutter.

This cutter is very simple in construction and can be adjusted to any cut by loosening thumb screws on sides, moving slides backward or forward as required.

WE MANUFACTURE A FULL LINE OF
Slaw and Crout Cutters, Potato Shredder, Corn Grater, etc.

Henry Disston & Sons, Inc.

KEYSTONE SAW, STEEL AND FILE WORKS,
PHILADELPHIA, PENNA.

An index at your fingers' ends

No handling "dead" matter, nor searching over pages of crossed-off items, as with book records. No re-writing, no transfering. The Y and E Card System is a living record; new cards are put in exactly their proper place—old cards ("dead" matter) are taken out. By having plenty of guides the exact card you want can be gotten almost instantly. No matter what, nor how many, records you keep, the Card System will keep them better and quicker. Send for Cat. No. 27—

Yawman & Erbe Mfg. Co., Rochester, N. Y.
New York Chicago Boston St. Louis
Philadelphia Pittsburg Toronto
San Francisco Cleveland
Baltimore

CHAS. E. MARIS, Williamsburg, Ia., WRITES: "THE AMERICAN ARTISAN certainly has a large circulation from the inquiries I received."

J. T. Walbert & Son, Paducah, Ky., write: "Our advertisement in your paper proved effectual."

HARDWARE
CUTLERY

BICYCLES
SPORTING GOODS

GUNS
RIFLES

TINPLATE
AMMUNITION

Peters Cartridges

Peters Cartridges

Peters Cartridges

LOADED WITH

King's Semi-Smokeless Powder.

PETERS .22 CALIBRE RIM-FIRE CARTRIDGES
won the National Sportsman's Exposition Tournaments, New York, in 1898, 1899, 1900 and 1901. The New England Sportsman's Tournaments and all the recent indoor rifle tournaments.

PETERS REVOLVER CARTRIDGES
made the highest scores at the long and the short range in the **International Revolver Match, 1900.** At Sea Girt Meeting, 1900, they won the Re-entry Revolver Match and the Revolver Team Match.

PETERS .45 CALIBRE GOVERNMENT CARTRIDGE
won these important matches at the Sea Girt Meeting, Aug. and Sept., 1900: Interstate Military Match; Regimental Team Match; Alicomers Military Match; New Jersey Rifle Association Trophy Match; Winchester Match.

KING'S SEMI-SMOKELESS POWDER

Won the Wimbledon Cup Match, Sept. 1900, 30 Shots at 1000 yards. This powder is the **Sportsman's All-round Powder,** Superior for long or short range shooting in Rifle, Revolver, Pistol and Gun.

Handy Book for Shooters and Sportsmen sent free to all applicants.

The Peters Cartridge Co.,

Government Square, Cincinnati, Ohio.

EASTERN BRANCH: { **T. H. KELLER, Manager,**
80 Chambers Street, NEW YORK.

Peters Cartridges

Peters Cartridges

Lackawanna Railroad

The Scenic Line
TO
New York City

Palatial Solid Vestibuled Trains
Superb Dining Cars
(Meals a la Carte)
Observation Cars **Latest Pullmans**
Elegant Day Coaches

3 THROUGH TRAINS DAILY from CHICAGO 3

Leaving Chicago	Arriving New York
10.35 a. m.	3.35 p. m. next day.
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Rates $18.00 First Class
$16.00 Second Class

CITY TICKET OFFICE: 103 Adams Street
GEO. A. CULLEN, Gen'l West'n Pass. Agt.
CHICAGO

JOHN PORTER, ALTOONA, PA., Writes: "I can't run my shop without THE AMERICAN ARTISAN."

We Are Not In The Trust

We have no connection with any other "Rogers" Company, and guarantee our silver ware to strip as much silver as any "Rogers Brand" on the market.

Puritan Oyster Fork.

Send For Our New Catalogue.

Simeon L. and George H. Rogers Company,

P. O. Box 1205. - - HARTFORD, CONN.

Factories: Hartford and Wallingford, Conn.

Royal Enameled Steel Ware

Have you ever handled a more satisfactory line?
Quality better than ever before.
Prompt Shipments. Complete line.
These are the reasons why we hold our trade, and---Continually add new customers to our already large list.
If you are not one of them let us hear from you.

National Enameling and Stamping Co.

BRANCH OFFICES

New York Milwaukee Baltimore Chicago St. Louis

Trade "M&M" Mark

The "M & M" 450 CANDLE POWER ARC LAMP

Trade "M&M" Mark

THE BEST IS THE CHEAPEST.

STORE LAMP. Patented.

Burns 12 to 15 hours with one filling. Diffuses more light than any electric arc. Does not affect your insurance policy. Permitted by all insurance companies. Absolutely non-explosive, odorless and smokeless. Tried, tested and used commercially for three years. Over 25,000 in practical use. One satisfied customer says:

Joliet, Ill., Mch. 22, 1901.
MARTIN & MOORHEAD,
54 W. Washington St.,
Chicago, Ill.

Gentlemen: We used six of these lamps last year and kept an accurate account of the expense. The gasoline cost us $25 and the chimneys and mantels $20.46 making a total cost of $45.46 for six lamps for a year. We believe we have just as good light as though we had had six electric arc lights, which would have cost us $360.

Yours respectfully,
BARRETT HARDWARE CO.

STREET LAMP. Patented.

There are others. We are saving light consumers thousands of dollars every month. We will furnish full particulars on request. Agents wanted in all unoccupied territory. Exclusive territory given. Our Pressure Mantles without an equal for use with any gasoline pressure light

Acorn Brass Works, DEPT. 4. Chicago.

THE NULITE VAPOR GAS LAMPS

For Home, Store and Street.

The Nearest Approach to Sunlight and Almost as Cheap.

ARC ILLUMINATORS 750 CANDLE POWER. 7 HOURS TWO CENTS.

Make your stores light as day. A Hardware house writes us:

"We like your lamps so well we are now working nights instead of days."

We also manufacture **TABLE LAMPS, WALL LAMPS, CHANDELIERS, STREET LAMPS, Etc.** 100 Candle Power seven hours ONE CENT. No wicks. No Smoke. No Odor. Absolutely safe. **THEY SELL AT SIGHT.** Exclusive territory to good agents. ☞ Write for catalogue and prices.

CHICAGO SOLAR LIGHT CO., Dept. 40, CHICAGO, ILL.

The Imperial Lighting System

PATENTS PENDING.

Economical, brilliant, durable, reliable and simple to operate. A light equal to an electric arc at a very low cost.

The Imperial Lighting System is far superior to the Electric Arc, being softer, whiter and absolutely steady. From a tank the gasoline is conveyed throughout an entire building through a flexible copper tube that can be put through crevices, around corners and concealed the same as electric wires, and as many lights as may be desired can be supplied from the same tank. The Imperial System burns common stove gasoline, gives a 1,200 candle power light, and one gallon of gasoline burns 16 hours.

All lamps are fully guaranteed, and are trimmed complete with full instruction as to installing and operating the system.

We also manufacture a complete line of Gravity and Air Pressure Lamps. Write for illustrated catalogue.

THE IMPERIAL GAS LAMP CO., Sole Manufacturers,
122-124 E. LAKE ST., CHICAGO, ILL., U. S. A.

Greig Brothers, Mitchell, Iowa, write: — "Please discontinue ad for Dinner, we have had applications from Ohio to Northern Wis."

Look Out For Frozen Pipes

No. 16 Torch. $2.25 net.

You should have ample facilities for quickly attending to calls of this kind. An extra torch or so costs little and will pay for itself the first cold morning. *Remember, your money back if not pleased* with any fire you purchase of our make. Jobbers sell them at factory price, or on receipt of $2.75 we will ship a No. 16 Torch by paid express. Our catalog is free. It's worth [illegible] to you.

Clayton & Lambert Mfg. Co.

DETROIT, MICH., U. S. A.

The Southern Railway

and

The Mobile and Ohio Railroad

through its Land and Industrial Department invite prospectors, investors, manufacturers and homeseekers to investigate propositions in all lines.

Come and see what splendid opportunities the South affords. Reading matter, maps and detailed information sent free upon application to

M. V. RICHARDS, Land and Industrial Agent, Washington, D. C.
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"It is true that advertising will not put merit into poor merchandise, but good merchandise often becomes poor for the want of good advertising."

—Some Essential Oils for Advertising.

asBESTos SAD IRONS

are hot where they should be hot, but never hot where they should be cold—lined with ASBESTOS, that's why. Handles can't break. They are the best finished and handsomest irons ever offered to the trade. Their many points make them READY SELLERS.

Catalog and Discounts for the asking.

THE DOVER MANUFACTURING CO.
CANAL DOVER, OHIO.

The B. O. E.
(Best on Earth)

Sad Irons,
Potts Pattern.

This is the best finished and best iron ever made, and while it costs more than the common Potts iron, it is worth double the price asked for it.

The Schreiber & Conchar Mfg. Co.,
Manufacturers of Hardware, Dubuque, Ia.

Standard Chain Company.
Chain of all Kinds.
Pittsburgh, Pa.

FOX
Brand Razors
Are Known as the Best.
We make all widths and Styles. The Fox Trade Mark is Registered. Send for Catalogue.

FOX CUTLERY CO.,
028 Main St., Dubuque, Ia. 48 Center St., New York, N. Y. Canandaigua, N. Y.

Charles Hahn, Red Lodge, Mon., writes: "Please discontinue ad of 'tools wanted.' Much obliged. Had a dozen offers."

FREE SITES

and Other Inducements to Reliable Manufacturing Concerns

The Indiana Illinois & Iowa Railroad Co.'s
(THE TIME SAVER)

Rails reach from the **Mississippi River to Lake Michigan.**

Intersecting every Railroad in and out of Chicago.

On its line are numerous large and successful manufacturing enterprises.

As well as many **unequaled locations** for manufacturing and industrial concerns.

Live towns and progressive people.

Manufacturing plants along the line of THE INDIANA, ILLINOIS & IOWA RAILROAD have the same advantages in shipping facilities and

FREIGHT RATES

to all points North, South, East and West as though located in Chicago, or if the tracks of all and every Railroad entered directly into their warehouses.

NO SWITCHING CHARGES.
NO EXPENSIVE TEAMING.
NO DELAYS.
Quick Satisfactory Service.

The Indiana, Illinois & Iowa Railroad realizes that saving in Freight Rates and "No Delays" for the manufacturer and shipper mean **mutual interest.**

IF you are not well located.
IF you want to better yourself.
IF you want a more favorable location.
IF you want the very best freight rates.
IF you want cheap fuel.
IF you want to avoid labor troubles.
IF you want your employes to have individual homes and contentedness.
IF you want to combine nearness to your markets.
IF you want free land for your plant.
IN fact if you want any kind of industrial or freight rate information call or address

INDIANA, ILLINOIS & IOWA RAILROAD
THE ROOKERY CHICAGO, ILL., U.S.A

E. J. Schultz, Kewanee, Ill., writes:

"I can say that my advertisement in The American Artisan convinces me that I cannot afford to be without your paper."

NICKEL PLATING OUTFITS.

ZUCKER & LEVETT & LOEB CO
OFFICES. 526. 528. & 530 W. 25TH ST.
NEW YORK. U.S.A.

SEND FOR CATALOGUE OF
NICKEL & ELECTRO PLATING
SUPPLIES & POLISHING MATERIALS

IT SELLS ON **SIGHT**

IT CAN'T WARP.
STRONGEST.
LIGHTEST.

Atkins Tubular Wood Saw

Surpasses Them All.

It's a NEW Thing

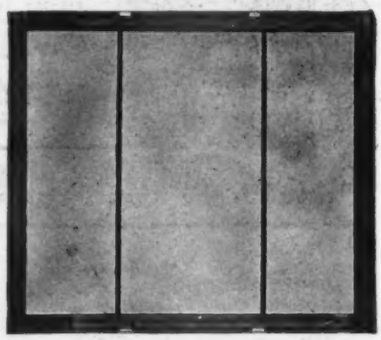
Manufactured exclusively under the Eickelberg patents by

E. C. Atkins & Co. (Inc.)

INDIANAPOLIS, IND.
No. 64 Reade Street, NEW YORK CITY.
BRANCH HOUSES: MEMPHIS, TENN. MINNEAPOLIS, MINN. ATLANTA, GA. PORTLAND, ORE.

Write for Discounts.

If you wish to know why the sales of the "Flyer Window Screen" increased 6,000 dozen last season, write



The A. J. Phillips Co.
FENTON, MICH.

Just a Little Higher

in price, but so much

HIGHER IN QUALITY

that the great majority of dealers prefer to sell

Caldwell Sash Balances

They can recommend them with clear conscience. Write for catalog.

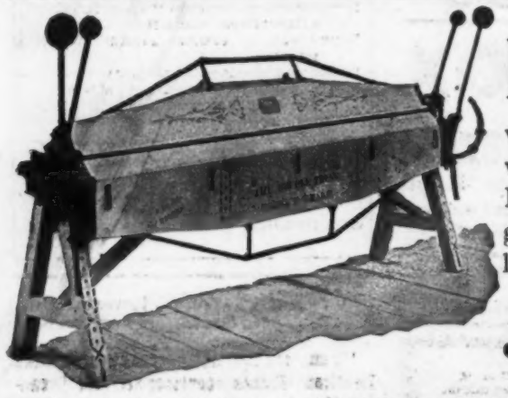
Caldwell Mfg. Co.
2 Jones St., Rochester, N. Y.

The O K Steel Brake.

The O K Steel Brake beats them all. Stronger, less expensive, more durable, works faster. Less freight charges. It is up-to-date. Sold by

H. WEISS & Co., 20 Cliff St., New York, N. Y.
RICHARDS & Co., 60 Union St, Boston, Mass.
JANNEY, SEMPLE, HILL & Co., Minneapolis, Minn.
D. H. ALLISON, 816 15th St., Denver, Colo.
C. SIDNEY SHEPARD & Co, Kansas City, Mo.
HOLBROOK, MERRILL & STETSON, San Francisco and Los Angeles, Cal.
C. J. SULLIVAN, 1112 Union St., Seattle, Wash
ILLINOIS ROOFING & SUPPLY Co., Chicago, Ill.

Dreis:, Andrews & Krump,
MANUFACTURERS, 3039 & 3041 S. Halsted St., CHICAGO, ILL.



THE NEW IMPROVED

Double Truss Cornice Brake

works on the same principle and does the same work, both in quality and quantity, as ordinary Iron Brakes and costs but one-third the price. We guarantee them to bend No. 22 gauge iron or lighter, easily, straight and true.

J. L. Perkins & Co.,
241 Lake Street, CHICAGO.

Western Agents
DOUBLE TRUSS CORNICE BRAKE CO., Buffalo, N. Y.

OLD DOMINION

Horse, Mule Shoes.

All the popular styles and weights.

Illustrated catalogue and prices on application.

Old Dominion Iron and Nail Works,

ARTHUR B. CLARKE, Prest. **Richmond, Va., U.S.A.**

Iwan's Volcano Revolving and Ventilating Chimney Top

BEST IN THE WORLD.

Patented Dec. 13, 1892, and March 14, 1894. Reissued Oct. 7, 1893.
Pat. in Canada Feb. 9, 1893, and Apr. 6, 1894.

BUY IWAN'S VOLCANO AND YOU WILL MAKE NO MISTAKE. SATISFACTION GUARANTEED.

Why Iwan's Volcano Revolving Chimney Top Excels all Others:

1st. The iron mountings are composed of only two parts, and no pins or wire are required to hold down cap.

2d. It protects chimney fully from rain, sleet and snow, and prevents all downward draft.

3d It has a Deflector corresponding with Hood, by which is formed the sloped opening in back of hood, which creates a strong upward draught, and allowing free passage of smoke. No other chimney top possesses these advantages.

If iron mountings only are ordered, patterns for hood and vane will be furnished free of charge.

Write for our complete illustrated circular of post hole augers, post hole diggers, drain cleaners, drain and ditching spades, hay knives, conductor pipe hangers, etc.

Sold by the Jobbing Trade.

Iwan Bros., Mfrs. of Hardware Specialties, **Streator, Ill.**

BUY

CLOSED.

The Triumph Adjustable Stove Pipes

AND SAVE TIME, SPACE AND MONEY.

NESTS 25 L.

The Triumph Adjustable Stove Pipes are easy to put up, and when up need no wire to hold them, as they are solid and tight.

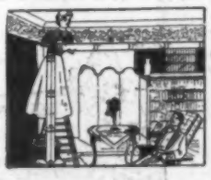
The Triumph Adjustables are here to stay,
And their demand is gaining day by day,
Their venture has gained great renown
In city, country and in town.

Write for Prices, etc.

PUTTING UP THE COMMON PIPE.

The Triumph Adjustable Stove Pipe Mfg. Co.,

JOLIET, ILL.



PUTTING UP THE TRIUMPH ADJUSTABLE.

TACKS

TOWER M'F'G. CO.
ELM & FRONT STS.
CINCINNATI, O.
MANUFACTURERS

FAMILY
COUNTER
MARKET
CANDY

ARE WARRANTED

POSTAL
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AND
COMPUTING

PELOUZE SCALES

CATALOGUE

PELOUZE SCALE & MFG CO.
132 W. JACKSON BLVD. CHICAGO.

Reversible Cast Iron Shoe Lasts and Stands

Made in 7 sizes and ready sellers.

Round Griddle

With Bail Plain or Ground.

We have the largest and best equipped factory in the South for the manufacture of Sad Irons, Country and Stove Hollowware, Ground and Unground; Sugar Kettles, English Pots, Cast Iron Shoe Lasts and Stands, Kitchen and Corner Sinks, Grates, &c.

Blacklock Foundry,

South Pittsburg, Tenn.

R. H. Fichtenmueller, Waukon, Ia., writes, "I could not get along without THE AMERICAN ARTISAN."

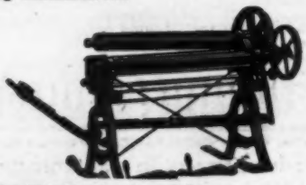
Wm. Reckmeyer & Son, Arlington, Neb. Write:

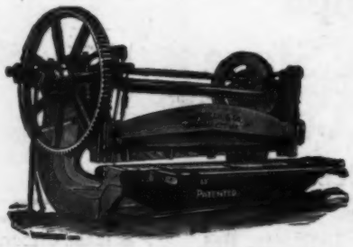
"Please discontinue advertisement in want column. We received replies from quite a number."

If
You Want
The Latest Designs,
and
Best Fitting
METAL CEILINGS
On The Market,
We Make Them.
Also
Cornice, Skylights,
Eaves Trough, Conductor Pipe.
J. H. ELLER & CO.,
Canton, Ohio.

Hardware Dealers
Can Handle
Northrop's Stamped
Steel Ceilings
and do well for their customers and themselves. Send for catalogue—give diagram and description of room for an estimate and we will do the rest.
H. S. Northrop, 53 Cherry Street, New York.

Improved Shears and Gauge Punches, with or without engine, or Direct Steam Shears. 6 different styles [hand or power].
Automatic Self-Opening Rolls, quickly and easily adjusted, all sizes to 20 feet. Also Crimping Rolls, Hand and Power Punches, Labor-saving machines, etc.

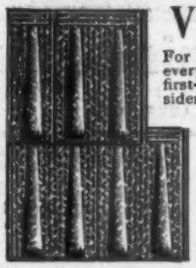




BERTSCH & CO., • • Cambridge City,

STOP THAT
Smoking Stove
BY PLACING ON CHIMNEY A
Powers Automatic Chimney Top
Fall Winds Cause Trouble with poor flues, but the **POWERS** will cure it.
We furnish **to Jobbers and Dealers** the **iron mountings,** with pattern, so tinners can make cover and vane.
Write the makers.
POWERS BROS.,
STREATOR, ILLS.

Sheet Metal Ornaments
Steel Ceilings and Hose Pliers
WE MAKE THE FINEST CRYSTALLIZED
STOVE BOARDS
ON THE MARKET.
MICHIGAN HARDWARE MFG. CO.
Grand Rapids, Mich.



VICTOR
For public buildings of every character where first-class roofing is a consideration, our galvanized
VICTOR SHINGLE
is unequalled.
Deeply embossed.
Presents attractive appearance.
Telescope Side Lock.
Catalogue fully describes them.
Montross Metal Shingle Co.,
CAMDEN, N. J.

The "Centennial"
Rain-Water Cut-Off.

The strongest, most durable and cheapest CUT-OFF on the market.
The only single Cut-off made to fit CORRUGATED and Plain Pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.
Patent applied for.
Manufactured only by
COONEY & GEIGER,
19 & 21 E. South St., INDIANAPOLIS, IND.

SEND TO THE
Willis Manufacturing Co.,
Galesburg, Ill.,
For a copy of their
NEW CATALOGUE (just issued) OF
CORNICE ORNAMENTS
AND STATUARY.
Also send in
Architects' Details for Estimates.

Henry Bidlake, Osnabrock, N. D., writes:
"Please discontinue ad for Tinners' Tools in your paper. It has done its work well."

"Kuehn's"

Patented.

Rain Water Cut-off

is made very strong and has a lever that cannot get out of order. **It will fit corrugated** pipe. There is a distinct saving of both labor and solder in applying it to the pipe.

La Crosse Steel Roofing & Corrugating Co.
LA CROSSE, WIS.

The Perfection Rain-Water Cut-Off.

EXCELS ALL OTHERS IN SIMPLICITY—STRENGTH—DURABILITY.

Klauer Mfg. Co.

SOLE MANUFACTURERS, DUBUQUE, IA.

SUCCESSORS TO W. A. SMITH & CO., PATENTEES, LIMA, O.

GARRY IRON & STEEL ROOFING COMPANY

CORRUGATED
ROOFING SIDING & CEILING
CLEVELAND OHIO.

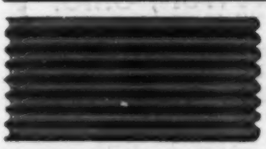
"Eagle" Brand Copper Rivets and Burrs.

STANDARD FOR QUALITY. (Lake Superior Copper.)

—MANUFACTURED BY—

THE PLUME & ATWOOD MFG. CO.,

29 Murray St., NEW YORK. 196 Lake St., CHICAGO, ILL.



Write us for Catalogue and Low Prices on BEST

Steel Roofing, Corrugated Iron, Etc.

We are large manufacturers of these goods and can save you money.

SYKES STEEL ROOFING CO. Chicago, Ill., and Niles, Ohio

Ornamental Pipe Straps.

The most perfectly cut and brightest tinned straps ever sold.

Malleable and Wrought Hooks.

Quality the best that can be made. Full line of valves and plungers. Ask for samples, catalog and prices.

BERGER BROS. CO., Mnfrs.,
231 and 237 Arch St., PHILADELPHIA.

TIN PLATE GALVANIZED SHEETS

REDUCED PRICES

W. J. BURTON & CO.,
"The Quick Shippers."
164-166 W. Larned St., - - Detroit, Mich.

Bradner Smith & Co.

Paper Makers,

CHICAGO.

BUILDING,
WRAPPING,
WRITING,
NEWS,
BOOK

Paper

Send for Catalogue.

Our "Confidential" Catalogue No. 115

Is intended **Exclusively** for the legitimate Hardware trade, and no Hardware man will find it difficult to compete in price and win the trade of every economical buyer if he has one.

It contains a bargain list of merchandise bought by us at

Sheriffs', Receivers', and Manufacturers' Sale, such as

Horse Shoes @ $48.00 a ton
Single Bit Axes @ 3.25 a doz.

and hundreds of bargains in an extensive line of Steel Roofing, Plumbing Material, Machines, Builders' Hardware, etc.

Write for it Today.

Chicago House Wrecking Co.
West 35th and Iron Sts., CHICAGO

S. C. SMITH, President — WM. GRAY, Treasurer — B. W. RIBBLE, Secretary

The East Bangor Consolidated Slate Co.

.... MANUFACTURERS OF ....

Laundry Tubs, Burial Cases, Urinal Stalls, Tiles, Genuine Bangor Roofing Slate and General Structural Slate.

EAST BANGOR, PENNSYLVANIA.

PERFORATED METAL

THE ROBERT AITCHISON PERFORATED METAL CO. 305-306 DEARBORN STREET CHICAGO, ILL.

TO·HAVE·AND·TO·HOLD!

To have and to hold the best class of metal ceiling trade, you should handle

"BERGER'S Classik" METAL CEILINGS

Berger's Classic has greater variety of patterns to choose from than any other makes of metal ceilings.

Berger's Classic is made in complete and harmonious Classified Designs.

Berger's Classic is distinctively artistic.

Berger's Classic is distinctively deep stamped.

Berger's Classic appeals to discriminating buyers, the class the back number, conglomerated ceilings utterly fail to interest.

Berger's Classic has valuable constructional features, reducing number of joints and making it easier to handle and erect.

Write to-day for Catalogue and full particulars.

Berger's Classic is the line it will pay you to push.

The Berger Manufacturing Co.

CANTON, OHIO.

NEW YORK OFFICE: No. 219 E. 23rd St.
PHILADELPHIA OFFICE: No. 1013 Arch St.
NEW ENGLAND BRANCH: No. 176 Federal St., Boston, Mass.
WESTERN BRANCH: Nos. 19 & 21 South Main St., St. Louis, Mo.

SPECIALTIES: Ceilings, Roofing, Siding, Eave Trough, Conductor Pipe, Hangers, Etc., Etc.

BURDELL & FOWLER - CLEV'D O.

CAN'T CARRY IT WITH HIM

When he dies, but in the meantime your customer will be much safer if our Fire Proof Ceilings and Side Walls are used. They don't leak, they don't burn.

In Eaves Trough, Conductor Pipe, Cornice, Fire Proof Doors and Shutters, Skylights, Hangers, Tin Plate, etc., we are making a very superior line of goods. Write for catalogue of designs and prices.

The Canton Steel Roofing Company,

NEW YORK AGENCY,
157 W. 23rd STREET.

CANTON, OHIO.

269-Q

American Tin Plate Company

MANUFACTURERS . . . . .

Tin Plate

Terne Plate

. . . and . . .

Black Plate

GENERAL OFFICES: Battery Park Bldg. New York.

It is made of Steel.

White Tile Top.

Tin or Brass Scoop.

Brass Dial.

IMPROVED
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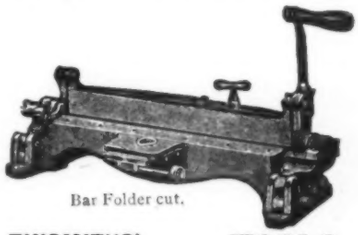

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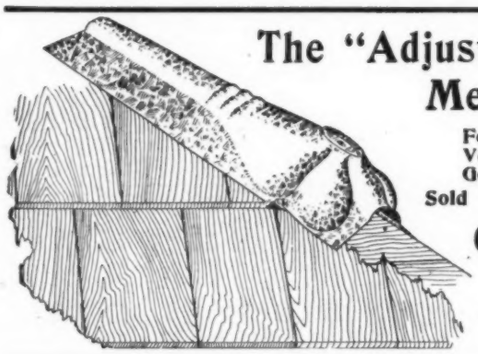

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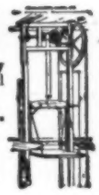

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